APPENDIX C UTAH DEPARTMENT OF HEALTH FILES

APPENDIX C

UTAH DEPARTMENT OF HEALTH FILES

300001-8	August 27, 1985 Potential Hazardous Waste Site, Site Inspection Report
300009-22	August 24, 1987 Potential Hazardous Waste Site, Site Inspection Report
300023-42	September 28, 1987 <u>Authorization to Discharge Under the National Discharge Elimination System</u> , Permit No.: UT-0022403
300043-44	Utah Department of Health memo regarding the rerouting of U.S. 40
300045-51	September 9, 1987 <u>Analytical Results Report of Air Sampling at Richardson Flat, Park City, Utah</u>
300052-54	August 15, 1985 Letter from Kenneth Alkema, EPA to Robert Duprey, EPA regarding Richardson Flats Sites
300055-63	October 25, 1985 <u>Analytical Results Report Richardson Flat</u> <u>Tailings Summit County, Utah</u>
300064-69	August 15, 1984 Letter from Dale Parker, Utah Department of Health to Eric Johnson, EPA plus attached June 4, 1984 Potential Hazardous Waste Site Preliminary Assessment
300070	Utah Department of Health memo entitled Richardson Flat Tailings, Summit County, Utah
300071-2	October 11, 1985 Figure 1 HRS Cover Sheet
300073	August 5, 1985 Letter from Eric Johnson, EPA to L. Sue Russell, Mitre Corporation
300074-75	July 11, 1985 Figure 1 HRS Cover Sheet
300076	December 18, 1984 Letter from E.L. Osika, Jr., United Park City Mines Company to Marv Maxell, Utah Department of Health
300077	September 4, 1984 Figure 1 HRS Cover Sheet

L IDENTIFICATION

SEPA	PART 1 - SITI	SITE INSPECT E LOCATION AND		UT	D980952	840		
II. SITE NAME AND LOCATIO	N			··		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
O1 SITE NAME (Legal, common or descri			02 STREE	T, ROUTE NO., OR SP	ECIFIC LOCATION I	ENTIFIER		
Richardson Flat	Tailings		annr	ox. 3.5 mi	les NE of	Park	City. Ht:	ah
03 CITY	101111190			05 ZIP CODE	06 COUNTY	1611	lo7COUNTY	08 CONG
Dowle City			UT	84060	Summit		CODE	UT-03
Park City 09 COORDINATES		10 TYPE OF OWNERSH			Summit		1 043	101-03
40° 40° 50!' 11			ERAL		D. COUNTY S. UNKNOY		AL	
III. INSPECTION INFORMATION								
01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERAT		. 1001				
6 , 19 85 *	☐ ACTIVE ÎD INACTIVE		NNING YEA	1 1981 R ENDING YEAR		INKNOWN		
04 AGENCY PERFORMING INSPECT		0.00	WANTED I CAL	- CHOING FEAR		···		
TALEPA BE EPA CONTI	RACTOR Ecology &	<u>Environment Inc</u>	C. MU	NICIPAL D.MI	UNICIPAL CONTR	ACTOR		
DE STATE DE STATE CON	ITRACTOR	late of hitti;	G. OT				(Marke of NRt)	
05 CHIEF INSPECTOR	<i>i</i>	teme of time			(Specify)	1011	I 08 TELEPHONE	. 100
`			_				1 .	
Susan Kennedy	<u> </u>	Reclamation	on Bic	logist	E&E		303 ¹ 757-	
09 OTHER INSPECTORS	•	10 TITLE			11 ORGANIZAT		12 TELEPHONE	-
Eric Johnson		EPA Reg. S	Site F	roject Off	ider EPA		303 1293-	-1519
Jeff Holcomb		Chemical E	Cnoine	er	E&E	<u>-</u>	303 1757-	_4984
0022 1102001115		0			+		1303 131	
Tom Smith		Safety Off	icer		E&E		303 ¹ 757-	-4984
Wade Hansen		Geologist			Utah De Env. He	ept. ealth	801)533-	-4145
Rob Smith Dave Tuesday		Chief Hydrogeologist Geochemist			E&E E&E		303 757- 303 757-	-4984 -4984
13 SITE REPRESENTATIVES INTERVI	EWED					Mines	16 TELEPHONE	NO
E.L. Osika, Jr.		Vice President	. 3	09 Kearns B alt Lake Ci	ildg.	·	801, 232	
		Geologist	1	air Lake Ci	ry, uı			
Kerry C. Gee		Engineer	s	ame as abo	ve		(801) 532	2-4031
							()	
							()	
	,	•		•			()	
							()	
17 ACCESS GAINED BY (Check one) 18 T	IME OF INSPECTION	19 WEATHER COND	TIONS				*****	
D PERMISSION WARRANT		varied						
IV. INFORMATION AVAILABL	E FROM							
01 CONTACT		02 OF (Agency/Organiz					03 TELEPHONE N	O.
Eric Johnson		EPA - Re	gion	VIII Denve	r]	(303) 293-	-1519
04 PERSON RESPONSIBLE FOR SITE	INSPECTION FORM	05 AGENCY		NOTATION	07 TELEPHONE N	o. 	08 DATE	
Susan Kennedy		EPA	E&E	FIT VIII	(303)757-	-4984	8,27	7 <u>8</u> 5

^{# 6/19,20/85; 7/30,31/85; 8/1,2/85}

\$EPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

L IDENTIFICATION

01 STATE 02 SITE NUMBER

UT D980952840

PANT 3 - DESCRIPTION OF HAZAI	RDOUS CONDITIONS AND INCIDENTS
II. HAZARDOUS CONDITIONS AND INCIDENTS	
03 POPULATION POTENTIALLY AFFECTED 04	OBSERVED (DATE 8/2/85) D POTENTIAL & ALLEGED NARRATIVE DESCRIPTION
analyses revealed elevated levels of arsenic, co	RF-GW-3) were collected and analyzed. Dissolved metals obalt, iron, manganese, and zinc. A drinking water well,
wells at Richardson Flat.	s is located two and a half miles from the contaminated
03 POPULATION POTENTIALLY AFFECTED 8/8 04 I	AOBSERVED (DATE 6/20/85) - D POTENTIAL D ALLEGED VARRATIVE DESCRIPTION
of lead. RT-SW-3 (downgradient) contained 1985	ted downgradient of the site, contained elevated levels ug/l lead as compared to RT-SW-l (upgradient) containing ed, but not an order of magnitude higher that the up-
	SOBSERVED (DATE 7/7/86) DOTENTIAL CALLEGED NARRATIVE DESCRIPTION
concentration when comparing upwind ve arsenic, cadmium and zinc are also hig	ed over a 100 fold increase in airborm lead rses downwind sampling locations. Values for hly elevated over the background samples.
See attached report under TDD R8-8608-	
03 POPULATION POTENTIALLY AFFECTED 04 I	OBSERVED (DATE) C POTENTIAL C ALLEGED NARRATIVE DESCRIPTION
No recorded history — fire and explos	ive conditions do not exist at the site.
<u> </u>	
03 POPULATION POTENTIALLY AFFECTED 04	OBSERVED (DATE)
19 and 20, vehicles were observed driv	cess or access by domestic livestock. On June ing near the tailings area along the access walking on the tailings on June 19 and 20, 1985.
03 AREA POTENTIALLY AFFECTED 040 041	OBSERVED (DATE 8/2/85) POTENTIAL ALLEGED NARRATIVE DESCRIPTION
arsenic, cadmium, copper, lead, magnesium, merci) contains elevated concentrations of antimony, mry, silver, sodium and zinc. Off site surface soil cadmium, lead, mercury and zinc probably due to wind
03 POPULATION POTENTIALLY AFFECTED 04 N	OBSERVED (DATE)
The Pacific Bridge well (located appro	x. 2.5 miles from the site) may potentially be on Flat Tailings. The well is used only as a
	residents, with other sources available. Surface water
01 F H. WORKER EXPOSURE/INJURY 02 (OBSERVED (DATE) C POTENTIAL C ALLEGED HARRATIVE DESCRIPTION
The tailings are being leased by Mr. Ray Wortey	to be used as backfill for sewer lines and road base.
	nt operators dumping what appeared to be native soil on
the tailings area.	
01 (X). POPULATION EXPOSURE/INJURY 02 (03 POPULATION POTENTIALLY AFFECTED: 04 N	C OBSERVED (DATE) \(\sum_{\text{D}} \) POTENTIAL \(\sum_{\text{ALLEGED}} \) ALLEGED LARRATIVE DESCRIPTION
· · · · · · · · · · · · · · · · · · ·	jury, however, the site is not secured from public
access or domestic livestock grazing.	

SEPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

L IDENTIFICATION

01 STATE 02 SITE MARKER

UT D980952840

E. HAZARDOUS CONDITIONS AND INCIDENTS (Comment) 01 🛱 J. DAMAGE TO FLORA 02 T OBSERVED (DATE 6/19/85 ...) D POTENTIAL C ALLEGED 04 NARRATIVE DESCRIPTION Peripheral tailings support vegetation including Juneus sp., Salix sp. and Verbascum thapsus predominantly, but most of the tailings are denuded due to high levels of soluble soils and metals. 01 K DAMAGE TO FAUNA 04 NARRATIVE DESCRIPTION (MCA **APOTENTIAL** 02 C OBSERVED (DATE. CALLEGED No apparent damage to area fauna. Two muskrats were observed swimming in the drainage ditch on site (near RT-SW-4). Fish in Silver Creek could potentially be affected by lead and arsenic being released from the tailings. 01 XL CONTAMINATION OF FOOD CHAIN 02 COBSERVED (DATE 04 NARRATIVE DESCRIPTION The possibility exists for metals to move through the food chain 1) if domestic livestock are feeding on local vegetation that has taken up and stored metals in edible portions of the plant; 2) if local populations of fish in Silver Creek are concentrating metals and are eaten by other animals or man. 01 XM UNSTABLE CONTAINMENT OF WASTES 02 T OBSERVED (DATE . C POTENTIAL 03 POPULATION POTENTIALLY AFFECTED. 04 NARRATIVE DESCRIPTION Tailings ponds are uncovered and therefore susceptible to gusty winds which carry fine-grain tailings material off-site. A dam constructed at the northwest end of the tailings prevents mass movement of solid material off-site. 01 IN DAMAGE TO OFFSITE PROPERTY 02 T OBSERVED IDATE __ 04 NARRATIVE DESCRIPTION The potential exists for damage to off-site property because the tailings material is allegedly being used as sewer line backfill and road base in the Park City area. 01 EXO CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02 T OBSERVED (DATE. POTENTIAL 04 NARRATIVE DESCRIPTION If tailings material is being used as sewer line backfill, the potential exists for sewer contamination by metals. 01 T P ILLEGAL/UNAUTHORIZED DUMPING 02 T OBSERVED (DATE _ _ POTENTIAL **ALLEGED** 04 NARRATIVE DESCRIPTION Dumping of native soil on to the tailings was observed by FIT members, but is under the supervision of United Park City Mines. 35 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLEGED HAZARDS No other hazards are known. I. TOTAL POPULATION POTENTIALLY AFFECTED: /. COMMENTS SOURCES OF INFORMATION (Cité spécific reférences + g state fees, sample annivers, réports Ecology & Environment, Inc. Files - Log Book, Sampling Activities Report. State of Utah BSHW Site Investigation and Preliminary Assessment.

	AC
D	74

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION ART 4- BERMIT AND DESCRIPTIVE INFORMATION

	L IDENT	FICATION
ı	OI STATE	02 SITE NUMBER D980952840

OEIA	ION	UT D980952840					
II. PERMIT INFORMATION				PTIVE INFORMATI		 	
01 TYPE OF PERMIT ISSUED	02 PERMIT NUMBER	OJ DATE I	SSUED	04 EXPIRATION DATE	05 COMMENTS		
(Cheen at that apply)	UT0022403	5/16	/82	6/30/86	FPA orant	ed extension and	
CA MPDES	010022403	1 2/10	/02	0,30,00	_	i a renewal from UPCM;	
C B UIC					 		
EC AIR		+				86 UPCM sent in	
S D BCRA METRIN CTATUS					. renewal a	application.	
GE RCRAINTERIM STATUS							
G STATE (South)							
E. H. LOCAL							
☐ I. OTHER (Specify	· · · · · · · · · · · · · · · · · · ·						
	 						
IJ NONE	L			<u> </u>			
III. SITE DESCRIPTION 01 STORAGE DISPOSAL (Choice of the appn). 02	AMOUNT 03 UNIT 0	OF MEASURE	04.75	REATMENT (Check of their ag		05 OTHER	
					HPPY:	US GIRER	
☐ B PILES	million _to	ms]	INCENERATION		T A. BUILDINGS ON SITE	
I C DRUMS, ABOVE GROUND				UNDERGROUND INJE CHEMICAL/PHYSICAL	-		
C D. TANK ABOVE GROUND				BIOLOGICAL	•	None	
_ E TANK BELOW GROUND			LE.	WASTE OIL PROCESS	SING	06 AREA OF SITE	
C F LANDFILL			I F SOLVENT RECOVERY 170				
C. G. LANDFARM			- C G OTHER REGIODING MECOVERT				
TH OPEN DUMP			E H.	OTHER	Erry:		
07 COMMENTS							
Slurry, generated from and currently covers a containing tailings ma	pproximately terial is pre	160 aca	res.	The metal	sulfide.	and carbonate-	
overlies a portion of	the tailings.	- ,			•		
IV. CONTAINMENT							
01 CONTAINMENT OF WASTES/Check one.		***					
A ADEQUATE, SECURE	C B. MODERATE	Æ C IN	ADEQU	JATE, POOR	C D. INSECUR	RE. UNSOUND, DANGEROUS	
02 DESCRIPTION OF DRUMS, DIKING. LINERS, BAR	·	**************************************					
A dam at the northwest	extension of	the ta	ailin	ngs is the o	nly form	of artificial	
containment on site.	The tailings	materia	al is	s uncovered,	any no n	inderlying liner	
is present.	•			•			
V. ACCESSIBILITY							
OT WASTE EASILY ACCESSIBLE YES	- NO						
02 COMMENTS							
The site is not secure	i from public	access	or	domestic li	vestock g	razing.	
VI. SOURCES OF INFORMATION (Cas assected	C references: e.g. state files: same	DH BREYES, 1800					
Ecology and Environment	Inc. Files	logbo	nok.	Sampling Ac	tivities	Penort	
	, =====================================	,	, ,	oampiing ne	CT + T CT C 2	Report.	

	O EDA	POTENTIAL HA	ZARDOUS WASTE SITE	L IDENTIFICATION		
≎ EPA			ECTION REPORT /NER INFORMATION	UT UT	D980952840	
IL CURRENT OWNER(S)			PARENT COMPANY # *******			
D1 NAME		02 D+8 NUMBER	OS NAME		09 0+8 MUMBER	
United Park City Mine	s Co.		N/A			
03 STREET ADDRESS (P 0 des AFD P ex.)		04 SIC CODE	10 STREET ADDRESS IP 0 Box MFD # sec		11 SIC CODE	
309 Kearns Bldg.					li sa cons	
Colt Toles Cana		07 ZP CODE	12 CTY	13 STATE	14 ZIP CODE	
Salt Lake City	UT	84101 020+8 NUMBER	OB NAME		00 0+8 NUMBER	
					00 0 V 0 (VOINOC)	
03 STREET ADORESS (P.O. BOA. RFD P. etc.)		04 SIC CODE	10 STREET ADDRESS/IP O Box. RFD # etc./		11 SIC CODE	
os criv	OS STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE	
·						
01 NAME		02 0+8 NUMBER	OB NAME		09 D+8 NUMBER	
03 STREET ADDRESS (P O Box AFD P etc.)		04 SIC CODE	10 STREET ADDRESS (P G Box RFC P MC		11SIC CODE	
os cm	OE STATE	C7 ZIP GODE	12 CITY	13 STATE	1 4 ZIP CODE	
O' NAME		02 D+8 NUMBE=			09 D+8 NUMBER	
O' NAME		02 D+8 NUMBE-	OE NAME		UPD+8 NUMBER	
03 STREET ADDRESS (P.O. Box. RFD # erc.)		104 SIC CODE	10 STREET ADDRESS (P O Box AFD + MC)	11 SIC CODE		
or on the second of the second						
os arv	06 STATE	G7 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE	
	j					
III. PREVIOUS OWNER(S) :Lust most recent !		·	IV. REALTY OWNER(S) IT ROOMS ARE THE	os' recem first:		
C: NAME		02 0-8 NUMBER	OI NAME	02 D+8 NUMBE=		
03 STREET ADDRESS (P O Box RFD P MC		64 SIC CODE	03 STREET ADDRESS # C Box RFC # etc		04 SIC CODE	
05 CITY	IOASTATE	07 ZIP CODE	IOS CITY	04 67 475	07 ZIP CODE	
03 CI. 7	0031210	U. ZIP CODE	03.3.1	06 31 A 16	U. ZP CODE	
01 NAME		02 0+8 NUMBER	01 NAME		02 D+8 NUMBER	
03 STREET ADDRESS (F O Box AFD + exc -		04 SIC CODE	OS STREET ADORESS P C BOL RED # PR.		04 SIC CODE	
:			•			
os cary	DE STATE	C7 ZIP CODE	os cm	O6 STATE	07 ZIP CODE	
21.1.1.15		02 0+6 NUMBES	lot hadé		02 0+8 NUMBES	
C' NAME		UZ UT O NUMBER	OT NAME			
03 STREET ADDRESS IF C Bas RFC . MC		o⇒ SIC CODE	CO STREET ADDRESS & G BOX REC # 40:		04 SIC CODE	
oscm	06 STATE	07 ZIP CODE	05 C/T)	OE STATE	07 ZIP CODE	
V. SOURCES OF INFORMATION (C++ ==	ecet references	e ç state fres kampre anarvs	g reports			
77						
Ecology and Environmen	it, Inc.	Files				
L						

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4	1	-77
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POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

T DEN	TIFICATION
O1 STATE	02 SITE NAMER D980952840

			PARISOPER	ATON INFORMATION				
	OR (Product allowers and	n coner		OPERATOR'S PARENT COMPANY (Familian)				
AME		1	02 D+8 NUMBER	10 NAME		11 D+8 NUMBER		
Inited Park	City Mines,	Co		N/A				
TREET ADDRESS (P.O.	ME. RED F. MC.;		04 SIC CODE	12 STREET ADDRESS (P.O Box.	AFD J etc.)	13 SIC CODE		
309 Kearns B	31dg.							
πΥ		DO STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE		
Salt Lake Ci	.ty	UT	84101					
EARS OF OPERATION	09 NAME OF OWNER	<u> </u>						
	same as al	ove.		-				
PREVIOUS OPERAT	TOR(S) (Les most recent to	BI, provide and	d different from owner)	PREVIOUS OPERATORS	PARENT COMPANIES	**************************************		
IAME.	**************************************		02 0+8 NUMBER	10 NAME		11 D+8 NUMBER		
TREET ADDRESS (P.O. Box. AFD P. MC)			04 SIC CODE	12 STREET ADDRESS (P O Box.	RFD#, sec.)	13 SIC CODE		
ÎTY .		06 STATE	67 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE		
EARS OF OPERATION	09 NAME OF OWNER C	NAING THIS	PERIÒD					
AME		C	02 5+8 NUMBER	10 NAME		11 0+6 NUMBEŘ .		
TREET ADDRESS (P O &	M. RFO P. MC.;	<u> </u>	04 SIC CODE	12 STREET ADDRESS (P O Box /	RFD# etc.1	13 SIC CODE		
.TY		06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE		
EARS OF OPERATION	08 NAME OF OWNER	SURING THIS	PERIOD					
AMÉ	1		02 D+6 NUMBEF	10 NAME		11 D+6 NUMBER		
TREET ADDRESS (P O Be	IE RFD # . etc.)		04 SIC CODE	12 STREET ADDRESS /P 0 dos /	RFD ≠ etc .	13 SIC CODE		
ıīY		06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE		
EARS OF OPERATION	09 NAME OF OWNER D	XURING THIS	PERIOD	-				
SOURCES OF INFO	RMATION (Cite appears	reterences s	g , state files : samole analyt	us neons.				

Ecology and Environment, Inc. Files.

&EPA	ı	POTENTIAL HAZ SITE INSP	01 874	L IDENTIFICATION		
VLIA	PART		TRANSPORTER INFORMAT	TON UT	D980952840	
IL ON-SITE GENERATOR						
D1 NAME		D2 D+8 NUMBER			· · · · · · · · · · · · · · · · · · ·	
None						
3 STREET ADDRESS (P.C. Box. REC.F. SEC.)		04 SIC COD€	-			
5 CITY	06 STATE	07 ZIP CODE				
				•		
II. OFF-SITE GENERATOR(S)		<u> </u>				
1 NAME		102 D+8 NUMBER	101 NAME		02 D+B NUMBER	
None				·		
3 STREET ADDRESS IP O BOX REG # MC :		04 SIC CODE	03 STREET ADDRESS (# C Box A	RFD # ME :	1 04 SIC CODE	
				•		
5 CITY	IO6 STATE	107 ZIP CODE	05 CITY	106 5	STATE 07 ZIP CODE	
₩ ₩17 1						
1 NAME		02 D+8 NUMBER	O1 NAME		02 D+8 NUMBER	
STREET ADDRESS - C for RES # etc		04 SIC CODE	03 STREET ADDRESS /4 C 802 A	16- a au-	04 SIC CODE	
TO THE PROPERTY OF THE PROPERTY OF THE		0-30002	or other koonese is a last		0-30001	
5 CITY	IOG STATE	TOT ZIP CODE	05 CITY	lne s	TATEIO7 ZIP CODE	
3 G. 7		O' ZIP GGDE	05 011 1	1000	J. A. C. D. D. GODE	
V. TRANSPORTER(S)		1000 - 000 0005			Too a surrest	
		02 D+8 NUMBER	01 NAME		02 0 + 8 NUMBE=	
Mr. Ray Wortey *					100000000000000000000000000000000000000	
STREET ADDRESS IP C. Box RFC P. etc.:		04 SIC CODE	03 STREET ADDRESS IP 0 801 A	FD # etc.	04 SIC CODE	
unknown					<u> </u>	
5 CITY	DE STATE	OF ZIF CODE	OS CITY	OE S	STATE 07 ZIF CODE	
		<u> </u>				
: NAME		02 D+6 NUMBER	01 NAME		02 D+8 NUMBER	
3 STREET ADDRESS (F C Box AFD # etc		04 SIC CODE	03 STREET ADDRESS (# C Box A	FC # etc ·	04 SVC CODE	
crry	06 STATE	07 ZIP CODE	05 CITY	06 S	TATE OF ZIP CODE	
SOURCES OF INFORMATION FORM	pacific retarances.	e C. state Pet. samon eners	· 190073			
* Alledgedly removes roadbase.	tailin	gs material	for use as sewer :	line backfil	l and	
Ecology and Environm Eric Johnson, EPA	ment, In	c. Files - I	etter from Dale Pa	arker, Utah	SHWB to	



POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 11 - ENFORCEMENT INFORMATION

L DENTIFICATION

D1 STATE 02 SITE NAMER

UT D980952840

ENFORCEMENT INFORMATION

11 PAST REGULATORY/ENFORCEMENT ACTION (II YES) NO

2 DESCRIPTION OF FEDERAL STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

- No agency enforcement action taken at this site.
- SI performed by State of Utah BSMW 12/21/84.
- SI performed by EPA FIT VIII, 6,7 & 8/85.

SOURCES OF INFORMATION (Cité specific reférences e.g. state ties, sample analysis, reports

Ecology and Environment, Inc. Files.

L IDENTIFICATION

SEPA	PART 1 - SIT	SITE INSPECTION REPORT ITE LOCATION AND INSPECTION INFORMATION						D980952	840
II. SITE NAME AND LOC									
01 SITE NAME (Legel, common of			02 STREE	T, ROUTE NO., O	R SPEC	IFIC LOCATION ID	ENTIFIER	**** <u> </u>	
Richardson Fl	at Tailings		app	rox. 2.5	mil	es NE of	Park	City, Uta	ah
03 CITY				05 ZIP CODE		COUNTY			08 CONG
Park City			UT	84060		Summit			UT-03
09 COORDINATES	1 ONGITUDE	10 TYPE OF OWNERSHI	P (Check or	101					
40° 40° 50''	111° 26 40".	F. OTHER	⊔ 8. FE	DERAL	⊔		. COUNTY i. UNKNOY	' 🗆 E. MUNICIP YN	AL
III. INSPECTION INFORM									
01 DATE OF INSPECTION 6 , 19, 85	# 02 SITE STATUS	late 1960		1 1981		•			
MONTH DAY YEAR	ACTIVE INACTIVE		WNING YEA		EAR	. —"	NKNOWN		
	PECTION (Check all that apply) FRF		·					·····	
🗆 A. EPA 🍱 B. EPA C	ONTRACTOR Ecology &	<u>Environment Inc</u>	C. MI	UNICIPAL 🗆 (D. MUN	ICIPAL CONTRA	ACTOR	(Name of him)	
☐ E. STATE ☐ F. STATE	CONTRACTOR	Name of firms	☐ G. O	THER		/Specifyi			
05 CHIEF INSPECTOR		06 TITLE				07 ORGANIZAT	ION	OB TELEPHON	E NO.
Susan Kennedy	•	Terrestria	al Bi	ologist		E&E		303 ¹ 757	- 4984
09 OTHER INSPECTORS		10 TITLE				11 ORGANIZATI	ON	12 TELEPHONE	NO.
Eric Johnson		EPA Reg. S	Site :	Project (Offi	er EPA		303 1293	-1519
Jeff Holcomb		Chemical E	Engin	eer		E&E		303 1757	-4984
	-		;						
Tom Smith		Safety Off	icer			E&E		303 ¹ 757	-4984
Wade Hansen		Geologist	Geologist			Utah De Env. He	ept. ealth	801)533	-4145
Rob Smith Dave Tuesdav	•	Chief Hydr Geochemist	Chief Hydrogeologist			E&E E&E		303 757 303 757	-4984 -4984
13 SITE REPRESENTATIVES IN	TERVIEWED	14 TITLE Vice		SADDRESS Un	ited	Park City	Mines	16 TELEPHON	ENO
E.L. Osika, J	r.	President	.	309 Kearn Salt Lake	s Blo	ig.		801, 232	2_4031
, , ,		Geologist		Sa LL_Lake	بللك	V		1 001 33.	
Kerry C. Gee		Engineer		same as a	abov	e r		(801) 53	2-4031
	· · · · · · · · · · · · · · · · · · ·			··					
							•	()	
								()	
				•				()	
							····	()	
				•					
17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDI	TIONS					<u></u>	
D PERMISSION WARRANT		varied							
IV. INFORMATION AVAIL	LABLE FROM								
01 CONTACT		02 OF (Agency/Organiza						03 TELEPHONE	
Paula Schmitt				VIII Den	ver			(303) 293	-1518
04 PERSON RESPONSIBLE FO	R SITE INSPECTION FORM	05 AGENCY	OS ORG	ANIZATION	1	7 TELEPHONE N	O .	08 DATE	
Susan Kennedy	,	EPA	E&	E FIT VII		(303)757	-4984	8,2	7 85

EPA FORM 2070-13 (7-81)

* 6/19,20/85; 7/30,31/85; 8/1,2/85; 7/7-14/86

Updated: 8/24/87

						T		
0	DA	PO ¹	TENTIAL HAZA			L IDENTIFICAT		
	\$EPA			TION REPORT		80952840		
				E INFORMATIO	N			
	TATES, QUANTITIES, AN			I				
			d waste quantimes		TERISTICS (Check at that apply			
X A SOLID	© [™] E. SLURRY ER. FINES □ F LIQUID	TONS -	2 million 1	Z A. TOXIC				
C SLUDG		CUBIC YARDS		☐ C. RADIO				
C D. OTHER	(Specety)						PPUCABLE	
		NO. OF DRUMS .		L				
IIL WASTE T				,	,	 		
CATEGORY	SUBSTANCE N	AME	01 GROSS AMOUNT	02 UNIT OF MEASURI	E 03 COMMENTS			
SLU	SLUDGE					*		
OLW	OILY WASTE							
SOL	SOLVENTS		<u> </u>					
PSD	PESTICIDES							
occ	OTHER ORGANIC CH							
ЮС	INORGANIC CHEMIC	ALS	Elevated a	rsenic, sod	lium, cyanide.	. 4		
ACD	ACIDS							
BAS	BASES	·	<u> </u>			·		
MES	HEAVY METALS	·		ls in taili	ngs material,		2 million	
	OUS SUBSTANCES (500 AD	pendis for most frequent	ry cred CAS Numbers)	· · · · · · · · · · · · · · · · · · ·	tons of t	ailings.		
01 CATEGORY	02 SUBSTANCE N	AME	03 CAS NUMBER	04 STORAGE/DIS	SPOSAL METHOD (05 CONCENTRATION	06 MEASURE OF CONCENTRATION	
TOC	Arsenic		999	Surface im	poundment	1650	ug/g *	
MES	Cadmium		999	(tailings)		56	ug/g	
MES	Copper		999	17		435	ug/g	
MES	Lead		999	19		538	ug/g	
MES	Manganese		999	11		2280	ug/g	
MES	Mercurv		999	19		1.24	ug/g	
MES	Nickel		7440-02-0	19		23	ug/g	
MES	Silver		999	17		21	ug/g	
IOC	Sodium		999	11		2998	ug/g	
MES	Zinc		999	11	,	5353	ug/g	
IOC	Cyanide		999	11		5.2	ug/g	
	* Concentration	n figures	are averag	es of 4 sur	face tailings	samples		
	(RT-SO-4,5,6							
						_		
	•							
V. FEEDSTO	CKS (See Appendix for CAS Multiple	war	<u> </u>	L	<u> </u>		<u></u>	
CATEGORY			02 CAS NUMBER	CATEGORY	01 FEEDSTOCK	NAME	02 CAS NUMBER	
FDS	none			FDS				
FDS	none	· · · · · · · · · · · · · · · · · · ·		FDS				
FDS				FDS				
FDS				FDS	·			
	1							

VI. SOURCES OF INFORMATION (Cite assente refer

¹ Memo to File; J. Holcomb; 7/12/85.

Analytical Results Report for Richardson Flat Tailings; Ecology and Environment, Inc. (E&E); 10/25/85; TDD R8-8508-07.

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	TIFICATION O2 SITE NUMBER				
DI STATE	02 SITE NUMBER				
	nasna52840				

SE	PA			TION REPORT E INFORMATION	1	UT D98	0952840
II. WASTE ST	TATES, QUANTITIES, AN	D CHARACTER	ISTICS				
	TATES (Check as their apply) E. E. SLURRY R. FINES OF LIQUID C. G. GAS	02 WASTE QUANT (Measures of musi be TONS		03 WASTE CHARACTI L. A TOXIC L. B. CORROL L. C. RADIOA L. D. PERSIST	CTIVE G FLAM	BLE I HIGHLY THOUS J EXPLOS MABLE K, REACTI	IVE VE PATIBLE
	(Specify:	NO OF DRUMS				·····	
III. WASTE T	YPE						
CATEGORY	SUBSTANCE N	AME	01 GROSS AMOUNT	Q2 UNIT OF MEASURE	03 COMMENTS		
SLU	SLUDGE						
OLW	OILY WASTE						
SOL	SOLVENTS						
PSD	PESTICIDES						
occ	OTHER ORGANIC CH	EMICALS					
ioc	INORGANIC CHEMIC	ALS					
ACD	ACIDS	· · · · · · · · · · · · · · · · · · ·	<u> </u>				
BAS	BASES						
MES	HEAVY METALS	· · · · · · · · · · · · · · · · · · ·					
IV. HAZARDO	DUS SUBSTANCES (See AD	nearly for most (request)	In creat CAS Numbers		<u>L</u>		
01 CATEGORY	02 SUBSTANCE NA		03 CAS NUMBER	04 STORAGE/DISF	POSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
IOC	Arsenic -		999	Surface Impoundment		.0928	ug/m3
MES	T .		999	(tailings)		.0825	ug/m ³
	Cadmium		999	(carrings)			ug/m ³
MES	Lead	· · · · · · · · · · · · · · · · · · ·	999	11		1.6478	1 2 3
MES	Zinc		999			1.4478	ug/m ³
	5 6 3						
	Ref. ³						
							
							
		 					
			<u> </u>		·		
							
			<u> </u>				
			•	,			
V. FEEDSTO	CKS (See Appendix for CAS Number	HZ1		<u> </u>			<u> </u>
CATEGORY	01 FEEDSTOCK	(NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTO	OCK NAME	02 CAS NUMBER
FDS				FDS			
FDS				FDS			
FDS			 	FDS			
FDS			 	FDS			
	OF INFORMATION	· · · · · · · · · · · · · · · · · · ·	<u> </u>	<u> </u>			
	OF INFORMATION (C.F.)	specific references, e.g.	. state files, sample analysis (e ports)			
3	vtical Results	Report of	Air Sampli	no at Richar	rdeon Flat.	FRE ETT. Q/1	0/86

Analytical Kesults Report of Air Sampling TDD R8-8608-05, E&E Files.

3

POTENTIAL HAZARDOUS WASTE SITE

I. IDENTIFICATION

SITE INSPECTION REPORT PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS	UT D9809	152840
W. HAZARDOUS CONDITIONS AND INCIDENTS	,	
01 CKA. GROUNDWATER CONTAMINATION 02 COBSERVED (DATE: 8/2/85) 03 POPULATION POTENTIALLY AFFECTED: 8 04 NARRATIVE DESCRIPTION Ground water samples from UPCM wells (RF-GW-2, RF-GW-3) were collected and analy analyses revealed elevated levels of arsenic, cobalt, iron, manganese, and zinc. and 222' deen) have been identified within one mile of the site.4 The best info	zed. Dissolved m Two domestic we	etals ils (210' indi-
01 M B. SURFACE WATER CONTAMINATION 414 02 CLOBSERVED (DATE 6/20/85) 03 POPULATION POTENTIALLY AFFECTED: 414 04 NARRATIVE DESCRIPTION Surface water samples from Silver Creek, collected downgradient of the site, composed to RT-SW-3 (downgradient) contained 1985 ug/1 lead as compared to RT-SW-1 147 ug/1 lead. Arsenic levels were also elevated. Water diverted from Silver Cland irrigation (276 acres) within 3-stream miles of the site.	tained elevated l	evels
or & C. CONTAMUNATION OF AIR 03 POPULATION POTENTIALLY AFFECTED: 4500 04 NARBATIVE DESCRIPTION Hi-volume air sampling performed on July 7-14, 1980 verified the release of inor air route. A 100 fold increase in airborne lead concentration was detected when downwind sampling stations. Values for arsenic, cadmium and zinc are also highly ground samples. Population residing within a 4-mile radius is approximately 45	ganic contaminant comparing upwind v elevated over t	versus
01 © D. FIRE/EXPLOSIVE CONDITIONS 02 © OBSERVED (DATE) 03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION No recorded history fire and explosive conditions do not exis		
03 POPULATION POTENTIALLY AFFECTED:	livestock. (On June
01 CYF. CONTAMINATION OF SOIL 03 AREA POTENTIALLY AFFECTED: 640 04 NARRATIVE DESCRIPTION Soil beneath the the tailings (RF-SS-6) contains elevated concen arsenic, cadmium, copper, lead, magnesium, mercury, silver, sodium and zinc. Of (RT-SO-1) contained elevated levels of arsenic, cadmium, lead, mercury and zinc deposition.	trations of an	ntimony, oil
01 % G. DRINKING WATER CONTAMINATION 8 02 03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION Two domestic wells are located within one mile of the tailings. Surface water not used for drinking water.	•	
01 & H. WORKER EXPOSURE/INJURY 03 WORKERS POTENTIALLY AFFECTED: 5 04 NARRATIVE DESCRIPTION The tailings are being removed by Mr. Ray Wortley to be used as backfill for sew In addition, FIT members observed heavy equipment operators dumping what appears the tailings area. Observations were made on June 19 and 20, 1985.	CODENTS CONTROLL ON 8 02 COSSERVED IDATE 8/2/85) POTENTIAL & ALLEGED ED. 8 04 MARRATIVE DESCRIPTION CM Wells (RF-GW-2, RF-GW-3) were collected and analyzed. Dissolved metals of arsenic, cobalt, iron, manganese, and zinc. Two domestic wells (210 entified within one mile of the site. 4 The best information available indiation in Territary volcanter rock composed primarily of andesitic pyroclastics. S. of incopsol injered deposits are hydraulically connected to underlying water-ion 20 cosserveropare 6/20/85) POTENTIAL ALEGED OF ACCOSSERVED TOWN 60 COSSERVED TOWN	
	POTENTIAL A	LEGED

No recorded history of population exposure or injury, however, the site is not secured from public access or domestic livestock grazing. Population exposure of concern include airborne contaminants, food chain contamination associated with the surface water route, and threat to domestic wells.

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POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

L IDENTIFICATION 01 STATE 02 SITE NUMBER

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS
IL HAZARDOUS CONDITIONS AND INCIDENTS (Continued)
01 Q J. DAMAGE TO FLORA 02 Q OBSERVED (DATE: 6/19/85) C POTENTIAL CALLEGED 04 NARRATIVE DESCRIPTION
Peripheral tailings support vegetation including Juncus sp., Salix sp. and
Verbascum thapsus, but most of the tailings are denuded due to high levels of soluble salts and metals.
01 💢 K. DAMAGE TO FAUNA 02 🗆 OBSERVED (DATE:) 💆 POTENTIAL 🗀 ALLEGED 04 NARRATIVE DESCRIPTION (INClude nameric) of species:
No apparent damage to area fauna. Two muskrats were observed swimming in the
drainage ditch on site (near RT-SW-4). Fish in Silver Creek could potentially be affected by lead and arsenic released from the tailings.
01 CXL CONTAMINATION OF FOOD CHAIN 02 C OBSERVED (DATE
The possibility exists for metals to move through the food chain 1) by domestic livestock grazing in areas where soil is contaminated; 2) by heavy metal concentration in local fish populations.
01. ZM. UNSTABLE CONTAINMENT OF WASTES South Aurolf Standard logues, Leating drums: /, 500
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION
Tailings ponds are uncovered and therefore susceptible to gusty winds which carry fine-grain tailings material off-site. A dam constructed at the northwest end of the tailings prevents mass movement of solid material off-site.
solid material off-site. 01 XN. DAMAGE TO OFFSITE PROPERTY 02 C OBSERVED IDATE. X POTENTIAL C ALLEGED
04 NARRATIVE DESCRIPTION
The potential exists for damage to off-site property because the tailings material is allegedly being used as sewer line backfill and road base in the Park City area.
01 XO. CONTAMINATION OF SEWERS. STORM DRAINS, WWTPs 02 C OBSERVED (DATE) X POTENTIAL C ALLEGED 04 NARRATIVE DESCRIPTION
If tailings material is being used as sewer line backfill, the potential exists for sewer contamina-
tion by metals.
01 T P ILLEGAL/UNAUTHORIZED DUMPING 02 TOBSERVED (DATE) , TOTENTIAL TALLEGED 04 NARRATIVE DESCRIPTION
Dumping of native soil on to the tailings was observed by FTT members, but is under the supervision of
United Park City Mines.
05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
No other hazards are known.
III. TOTAL POPULATION POTENTIALLY AFFECTED: 4500
IV. COMMENTS
·
V. SOURCES OF INFORMATION (Cité souchic references, e. g. state (sex. sample snavysts. reports)
Well Logs (#34833 and #A-34356). Water Resources of the Heber-Kamas - Park City Area North-Central Utah; Tech. Publ. No. 27. Telecon; S. Kennedy to J. Anderson; 7/18/85.
7 Weber River Decree and Corresponding Plat.

⁸ Telecon; S. Kennedy to J. Harrington; 9/4/85. 9 Telecon; S. Kennedy to L. Mize; 7/17/85.

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I. IDENT	IFICATION
O1 STATE	02 SITE NUMBER 1080952840

VEFA	DART A. DERV	SITE INS		TION PTIVE INFORMATI		UT D980952840
II. PERMIT INFORMATION	FART T - Chites	H AND DE.	SUNIF	TIVE INFUNMATI	ION	
01 TYPE OF PERMIT ISSUED	02 PERMIT NUMBER	03 DATE IS	SSUED	04 EXPIRATION DATE	05 COMMENTS	
(Check all ther apply)	1		1	1		
O A NPOES				 '	 	
□ B. UIC					 	
□ C. AIR				<u> </u>		
□ D. RCRA				 		
E. RCRA INTERIM STATUS	<u>.</u>			 '		
F. SPCCPLAN				<u> </u>		
G. STATE (Soechy)				<u> </u>		
☐ H. LOCAL, Southy						
☐ I. OTHER (Specify)				1		
ϪJ. NONE				['		
III. SITE DESCRIPTION						
		OF MEASURE	04 TR	REATMENT (Check of that of	DON	05 OTHER
X A. SURFACE IMPOUNDMENT	2 million to	ons	□ A.	INCENERATION		
C B. PILES			1	UNDERGROUND INJE	ECTION	A. BUILDINGS ON SITE
C. DRUMS, ABOVE GROUND)		CHEMICAL/PHYSICA	4L	
☐ D. TANK, ABOVE GROUND				BIOLOGICAL	<u>-</u>	None 06 AREA OF SITE
☐ F. LANDFILL			1	WASTE OIL PROCESS SOLVENT RECOVERY		DE AREA OF SHE
☐ G. LANDFARM			1	OTHER RECYCLING/		160 (Acres)
☐ H. OPEN DUMP			i	OTHER	AECOVER:	
☐ I. OTHER			1	/Spec	JCdy1	
(Specify) 07 COMMENTS			<u></u>			
Slurry, generated fro	om milling act	ivities	พล	- sined to (Dicha	des Dist area
and currently covers	approximately	160 ac	, was	a bihen co o	Tue victor	fdSon flat area
containing tailings m	eppronuncci,	TOU ac.	ita.	Ille merar	Sulliue,	and carbonate-
overlies a portion of	Altiiai is pro	ssencry	a st	olld matrix.	. An epne	emeral pond
Overtres a horeron or	the tarrings.	•				
IV. CONTAINMENT					7	
01 CONTAINMENT OF WASTES (Check one)				***************************************		
☐ A. ADEQUATE, SECURE	☐ B. MODERATE	X C. IN	IADEQU	JATE, POOR	C D. INSECUF	RE, UNSOUND, DANGEROUS
02 DESCRIPTION OF DRUMS, DIKING, LINERS, B	ADDIERS FTC					
A dam at the northwes		f the tr	eili:	noo ie the (1v form	-f+ificial
containment on site.	The tailing	moteria	3444. -1 - 1.	igs to the o	BITA TOTH	or artificial
is present.	file carrings	IIIgrei To	31 10	3 uncovereu,	, and no u	inderlying liner
is present.						
l						
V. ACCESSIBILITY		,				
OT WASTE EASILY ACCESSIBLE. X. YES	i 🗆 NO				 	
02 COMMENTS				_		
The site is not secur	ed from public	: access	s or	domestic li	.vestock g	grazing.
VI. SOURCES OF INFORMATION (Cite acce	ander relevances, e.g. state files, sar					
See pages 2, 2A and 4	······································			<u> </u>		
oee pages 2, 2n ana .	•					
1						

2	FPA

ĺ	I. DENT	TEICATION
		02 SITE NUMBER
	UT	D980952840

VEFA	1	PART 5 - WATER	SITE INSPECT DEMOGRAPHI			ENTAL DATA	UT	D98095	2840
IL DRINKING WATER SUF	PLY								
01 TYPE OF DRINKING SUPPLY (Cheer as approxime)			02 STATUS				03	DISTANCE TO ST	E
_	URFACE	WELL	ENDANGERE	D AFFEC	TED	MONITORED		277	
COMMUNITY	A. 🗆	8. ' '	, A. 🛣	B . 9	_	Ç. 🗆	A	3/4	(im))
NON-COMMUNITY	C. []	D. 💢	D. 🗆	E. (3	F. 🗆	B.		(mi)
II. GROUNDWATER									
O1 GROUNOWATER USE IN VICE CI A. ONLY SOURCE FOR DE		B. DRINKING (Other sources availab	DUSTRIAL, IRRIGATION	· /Lim	MMERCIAL.	INDUSTRIAL, IRRIGA	TION	□ D. NOT USED, U	NUSEABLE
D2 POPULATION SERVED BY GR	OUND WATES	88		03 DISTANCE	TO NEARE!	ST DRINKING WATER	WELL	3/4	(mi)
04 DEPTH TO GROUNDWATER	10	5 DIRECTION OF GRO	UNDWATER FLOW	06 DEPTH TO		07 POTENTIAL YIE	.p	08 SOLE SOURCE	E AQUIFER
50 ⁴		nor	th	OF CONCE 50	:RN (ft)	of Aquifer unknown	(gpd)	C YES	X NO
of the site. One is 222 feet deep				et.		level of 42	reet.	The secon	ia wett
O RECHARGE AREA				11 DISCHARG		•			
CXYES COMMENTS		•		O YES	COMMENT	rs ·			
				4					
V. SURFACE WATER			· · · · · · · · · · · · · · · · · · ·			·			
A. RESERVOIR. RECREDENING WATER SO	ATION DURCE	IMPORTAN'	I. ECONOMICALLY TRESOURCES	⊒ c. ca	OMMERCIA	AL INDUSTRIAL AFFECTED	<u> </u>	D. NOT CURREN	
								5.077410210	
Silver Creek						<u>X</u> '		· · · · · · · · · · · · · · · · · · ·	
GM Pace Ditch						<u>=</u>	<u>ar</u>	prox. 40	<u>U (mi)</u>
									(mi)
. DEMOGRAPHIC AND P	ROPERTY	NFORMATION							
11 TOTAL POPULATION WITHIN					02	DISTANCE TO NEARE	EST POPL	ILATION	
ONE (1) MILE OF SITE A. 11 NO OF PERSONS	TWO B	(2) MILES OF SITE 570 No. of Persons	THREE (3	4500	TE		3/4	(mi)	
3 NUMBER OF BUILDINGS WITH	N TWO (2) M	LES OF SITE		04 DISTANCE	TO NEARES	T OFF-SITE BUILDING	i		
	150					3/	4 ,	ni)	
								10)	
Park City, Ut fluctuates fr permanent pop	ah is a	approximate O to 10,000	ly 2.5 milduring the	les soute	hwest	of the si	te.	The popular-round	

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		TRICATION
	01 STATE	02 SITE NUMBER
- 1	ידיון	700000570

ŞEPA	DAD	SITE INSPECTION REPORT IT 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA					UT D980952840		
VI. ENVIRONMENTAL INFORMATION									
01 PERMEABILITY OF UNSATURATED Z		Mat :							
□ A. 10 ⁻⁶ ~ 10-	e cm/sec	□ B. 10 ⁻⁴ - 10 ⁻⁶ cm/sec □	C. 10-4	- 10 ⁻³ cm	√sec 🂢 D. GRE	EATER THAN	10 ⁻³ cm/sec		
02 PERMEABILITY OF BEDROCK (Check	priei								
A. IMPERN	MEABLE 10 ⁻⁶ cm/eeci	器 RELATIVELY IMPERMEAB	LE C.	RELATIVE	Y PERMEABLE		PERMEABLE man 10 ⁻² convency		
03 DEPTH TO BEDROCK	04 DEPTH	OF CONTAMINATED SOIL ZONE	· · · · · · · · · · · · · · · · · · ·	05 SOIL OF			-		
(ft)		unknown (ff)		7.7	4				
D8 NET PRECIPITATION	07 ONE YE	AR 24 HOUR RAINFALL	OB SLOPE SITE S	LOPE	DIRECTION OF	SITE SLOPE	TERRAIN AVERAGE SLOPE		
(in)		1.25 (in)	1	<u> </u>	north no	rtheast	0-5		
09 FLOOD POTENTIAL	<u></u>	10	 		<u> </u>				
SITE IS IN 100 YEAR FLO		SITE IS ON BARRI							
11 DISTANCE TO WETLANDS (5 acre maner	um.		12 DISTAN	CE TO CRIT	ICAL HABITAT (of as	· .			
ESTUARINE		отнея (freshwater)					_ (mi)		
A. N/A (mi)	8	(mi)	EN	IDANGERE	D SPECIES: NO	en dange	red species in Park () City area.		
DISTANCE TO:		RESIDENTIAL AREAS, NATIO	NAUSTATE	E PARKS.			RAL LANOS		
COMMERCIAL/INDUSTR	IAL	FORESTS, OR WILDLIF 6 mi. National		ES	PRIME A	IG LAND	AGLAND		
1.5 (mi)		1.5 mi. Residen	tial Are	ea	s N/A		jacent to site		
A (mi)		B	(ini)		C	(110)	o <1 mile (mi) tureland, hay		
14 DESCRIPTION OF SITE IN RELATION	TO SURROUN	IDING TOPOGRAPHY							
Richardson Flat is adjacent to Silver		-	the b	ase o	f the Was	atch Ra	nge,		
					•				
		•							
•									
•									
					•				
	····								
VII. SOURCES OF INFORMATIO	N /Cae special	references, e.g., state ffes, sample enerysis,	reports				·		
10 Telecon; S. Ker	nnedy t	co Larry England;	9/4/85		e.				

€EPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 6 - SAMPLE AND FIELD INFORMATION

L IDENTIFICATION
01 STATE 02 STE NAMEA
UT D980952840

		PART 6 - SAMPLE AND FIELD INFORMATION	D900932040				
IL SAMPLES TAKEN							
SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	O3 ESTIMATED DATE RESULTS AVAILAB				
GROUNDWATER	3	EPA Region 8 Laboratory, Lakewood, CO	R691d/85				
SURFACE WATER	6	11 11 11	Rec'd 7/12/85				
Tailings Sur WASTE Subsurfa	face 4	EPA Region 8 Lab & Versar Inc. Springfiel	Rec'd 7/12/85				
AFR (High-vol)) 29	Hittman-Ebasco, Columbia, MD	A 8/86				
RUNOFF							
SPILL							
som Surface Subsurfac	e 2	EPA Region 8 Lab, Lakewood, CO EPA Region 8 Lab & Versar, Inc. Springfie	Rec'd 7/12/85 1dRec'd 10/16/8				
VEGETATION		, , , , , , , , , , , , , , , , , , ,	A.				
OTHER							
III. FIELD MEASUREME	NTS TAKEN						
1 TYPE	02 COMMENTS						
pН	Surface water	Ground water samples ranged from 6.43 to 6.89 Surface water samples (Silver Cr. tailings ditch) ranged from 7.26 to 7.54					
temperature	Ground water Surface water	Ground water 9,5°C to 11°C Surface water 19°C to 20°C					
conductivity	Ground water Surface water	Ground water 350 to 1450 umhos/cm Surface water 550 to 1400 umhos/cm					
volatile organics (HNu)	No readings s	No readings greater than background					
radiation		greater than background					
IV. PHOTOGRAPHS AN	ID MAPS						
OI TYPE CKGROUND	AERIAL	02 IN CUSTODY OF ECOLOgy and Environment FTT VIII Files					
	CALOCATION OF MAPS Ecology and Environment FIT VIII Files						

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cité aprecific references, e.g., state tiés, sample anavast, recorts)

See pages 2, 2A, 4 and 7.

		POTENTIAL HA	ZARDOUS WASTE SITE	I. IDENTIFICATION		
⇔EPA		SITE INSP	ECTION REPORT INER INFORMATION	UT D980952840		
IL CURRENT OWNER(S)			PARENT COMPANY IT acceptants			
01 NAME		02 D+8 NUMBER	OS NAME		09 D+8 NUMBER	
United Park City Mines	Co.		N/A			
03 STREET ADDRESS (P.O. Box, RFD F. etc.)		04 SIC CODE	10 STREET ADDRESS (P O Box. AFD P. etc.)		11 SIC CODE	
309 Kearns Bldg.	lan in in					
Salt Lake City	UT	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE	
OI NAME	1 01	84101 102 D+8 NUMBER	OS NAME		09 D+6 NUMBER -	
03 STREET ADDRESS (P. O. Box, RFD #, etc.)		04 SIC CODE	10 STREET AOORESS IP O Box. RFD # exc./		11 SIC CODE	
05 CITY	OS STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE	
01 NAME		02 D+8 NUMBER	OB NAME		09 D+8 NUMBER	
O3 STREET ADDRESS (P O Box, RFD # etc.)		04 SIC CODE	10 STREET ADDRESS (P 0 Bos. RFD # BIC.)		11SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE	
O1 NAME		02 D+8 NUMBER	OS NAME	· · · · · · · · · · · · · · · · · · ·	09 0+8 NUMBER .	
03 STREET ADDRESS (P O. Box. RFD #. orc.)		04 SIC CODE	10 STREET ADDRESS (P.O. Box. RFD # . etc.)		11 SIC CODE	
05 ary	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE	
III. PREVIOUS OWNER(S) (Last most recom tres	<u>. l</u>	<u>L</u>	IV. REALTY OWNER(S) (II appairable and in			
01 NAME		02 D+8 NUMBER	OT NAME		02 D+B NUMBER	
03 STREET ADDRESS (P O Box AFO P MC.)		04 SIC CODE	03 STREET ADDRESS (P O Box AFD P MC)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	OS CITY	06 STATE	07 ZIP CODE	
O1 NAME	- -	02 D+8 NUMBER	O1 NAME		02 D+8 NUMBER	
03 STREET ADDRESS (P. O. Box., RFD P. etc.)		04 SIC CODE	03 STREET ADDRESS IP O Box. RFD # etc.		04 SIC CODE	
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V. SOURCES OF INFORMATION (Cital assecuto retainences, e.g. state fles, samore analysis, reports)						
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ŞEPA			ECTION REPORT	O1 STATE 02	SITE NUMBER 0980952840	
	PART!	9 - GENERATOR/T	TRANSPORTER INFORMATION	UT	0980932840	
IL ON-SITE GENERATOR						
01 NAME	· · · · · · · · · · · · · · · · · · ·	02 D+8 NUMBER				
None						
03 STREET ADDRESS (P.O. Box. RFD #. sec.)		04 SIC CODE			•	
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Mr. Ray Wortley *					•	
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W COURCES OF INCORMATION			<u>_L</u>			
V. SOURCES OF INFORMATION (Cross	pecific references.	e.g . Itale lies, sample analys	e. reports:	,,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		

^{*} Alle gedly removes tailings material for use as sewer line backfill and roadbase.

Site Inspection Report, Richardson Flat Tailings; Utah Bureau of Solid and Hazardous Waste; 9/4/84; in E&E files under TDD R8-8504-23.

OFDA	POTENTIAL HAZARDOUS WASTE SITE		L IDENTIFICATION
EPA	SITE INSPECTION REPORT PART 10 - PAST RESPONSE ACTIVITIES		01 STATE 02 SITE NAMER UT D980952840
II PAST RESPONSE ACTIVITIES			
01 DR. BARRIER WALLS CONSTRUCTED 04 DESCRIPTION	02 DATE	03 AGENCY	
None observed or reported			
01 S. CAPPING/COVERING 04 DESCRIPTION	02 DATE	03 AGENCY	
None observed or reported			
01 T. BULK TANKAGE REPAIRED 04 DESCRIPTION	O2 DATE	03 AGENCY	
None observed or reported			
04 DESCRIPTION	02 DATE	03 AGENCY	
None observed or reported	02 DATE	03 AGENCY	
04 DESCRIPTION		US AGENCT	
None observed or reported.	02 DATE	03 AGENCY	
O4 DESCRIPTION None observed or reported.		-	
01 🗆 X. FIRE CONTROL 04 DESCRIPTION	02 DATE	03 AGENCY	
None observed or reported.			
01 🗆 Y. LEACHATE TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY	
None observed or reported	i.		
01 □ Z. AREA EVACUATED 04 DESCRIPTION	02 DATE	03 AGENCY_	
None observed or reported.			
01 C 1. ACCESS TO SITE RESTRICTED 04 DESCRIPTION	O2 DATE	03 AGENCY	
None observed or reported 01 C 2. POPULATION RELOCATED	02 DATE	03 AGENCY	
04 DESCRIPTION		US AGENCY_	
None observed or reported 01 © 3. OTHER REMEDIAL ACTIVITIES	02 DATE	03 AGENCY_	
04 DESCRIPTION	UZ DATE	OS AGENCT_	
None observed or reported	1.		
III. SOURCES OF INFORMATION (Cre specific referen	ences: e.g., siate files, sample enerysis, recorts;		
See pages 2, 2A, 4 and 7	and 11.		

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POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 11 - ENFORCEMENT INFORMATION

L IDENTIFICATION

01 STATE 02 SITE NUMBER

UT D980952840

IL ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION C YES X NO

02 DESCRIPTION OF FEDERAL STATE. LOCAL REGULATORY/ENFORCEMENT ACTION

- No agency enforcement action taken at this site.
- SI performed by State of Utah BSMW 12/21/84.
- SI performed by EPA FIT VIII, 6,7 & 8/85.
- Air sampling performed by EPA FIT VIII, 7/7-14/86.

III. SOURCES OF INFORMATION (Cité specific references, e.g., state ties, sample enalysis, reports)

See pages 2, 2A, 4 and 7 and 11.

Permit No.: UT-0022403

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION VIII DENVER PLACE 999 18TH STREET, SUITE 500 DENVER, COLORADO 80202-2405

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. §1251 et seq; the "Act"),

the United Park City Mines Company,

is authorized to discharge from a facility located at Keetley Station, Utah,

to receiving waters named Drain Tunnel Creek, a tributary of the Provo River,

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective November 1, 1987.

This permit and the authorization to discharge shall expire at midnight, June 30, 1992.

Signed this 28th day of September 1987.

Authorized Permitting Official

Max H. Dodson

Di rector

Water Management Division

Title

00300024

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 - B. Monitoring Procedures
 - C. Penalties for Tampering
 - D. Reporting of Monitoring Results
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I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. <u>Definitions</u>

- 1. The "30-day (and monthly) average," other than for fecal coliform bacteria and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for fecal coliform bacteria and total coliform bacteria. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.
- 2. The "7-day (and weekly) average," other than for fecal coliform bacteria and total coliform bacteria, is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, which ever is applicable. Geometric means shall be calculated for fecal coliform bacteria and total coliform bacteria. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week which begins on Sunday and ends on Saturday shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains the Saturday.
- 3. "Daily Maximum" ("Daily Max.") is the maximum value allowable in any single sample or instantaneous measurement.
- 4. "Composite samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
 - a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
 - b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;

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A. <u>Definitions</u> (Continued)

- c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "x" gallons of flow); and,
- d. Continuous collection of sample, with sample collection rate proportional to flow rate.
- 5. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
- 6. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
- 7. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- 8. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- 9. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 10. "Director" means Director of the United States Environmental Protection Agency's Water Management Division.
- 11. "EPA" means the United States Environmental Protection Agency.

B. Specific Limitations and Self-Monitoring Requirements

1. Effluent Limitations and Monitoring Requirements

During the period beginning with the effective date of this permit the permittee is authorized to discharge from Outfall serial number 001.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics	Discharge Lir	mitations <u>a</u> /	Monitoring Requ	uirements a/
	Other Units ((Specify) Daily	Measu rement	Sample
	<u>Average</u>	Max imum	Frequency	Туре
Flow-M ³ /Day (MGD)	N/L	N/L	Continuous	Recorded
Total Suspended Solids	20 mg/L	30 mg/L	1/week	Grab
Lead, total	0.200 mg/L	0.300 mg/L	1/month	Grab
Lead, dissolved	N/L	0.05 mg/L	1/month	Grab
Zinc, total				
Apri 1-July	0.75 mg/L	1.5 mg/L	1/week	Grab
AugMarch	0.50 mg/L	1.0 mg/L	1/week	Grab
Zinc, dissolved	0.25 mg/L	N/L	1/week	Grab
Copper, total	0.15 mg/L	0.3 mg/L	1/quarter	Grab
Copper, dissolved	N/L	0.05 mg/L	1/quarter	Grab
Mercury	0.001 mg/L	0.002 mg/L	1/quarter	Grab
0il and Grease	N/L	10 mg/L	1/month	Grab
Whole Effluent Toxicity	See Specific L	imitation No. 2	See Specific Lim	itation No. 2
TUS	N/L	N/L	1/month	Grab

The discharge shall have a pH value between 6.5 and 9.0 at all times and shall be monitored daily by a grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: At the point of discharge from Ontario Drain Tunnel #2, after the final treatment pond.

See Definitions part 1A for definition of terms.

PART I

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- B. Specific Limitations and Monitoring Requirements (Continued)
 - 2. Starting in January, 1988, the permittee shall, once each calendar quarter, conduct acute static replacement toxicity tests on a grab sample or a flow proportioned composite sample of the final effluent.

The replacement static toxicity tests shall be conducted in accordance with the procedures set out in the latest revision of "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms", EPA-600/4-85-013 (Rev. March 1985). The permittee shall conduct an acute 48-hour static toxicity test using Ceriodaphnia sp. and an acute 96-hour static replacement toxicity test using fathead minnows 5 days (+ 2 day) of age. After each 24 hours of the test period, the dilutions shall be replaced with freshly prepared dilutions of the original effluent sample. The dilution water shall be reconstituted fresh water with hardness and alkalinity similar to that of the effluent.

Test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting calendar quarter (e.g., biomonitoring results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, with the remaining biomonitoring reports submitted with DMRs due each July 28, October 28, and January 28). The format for the report shall be consistent with the February 1987 Region VIII Guidance For Biomonitoring Reporting, or its latest revision, and shall include all chemical and physical data as specified for the tests.

If the results for one year (four consecutive quarters) of biomonitoring indicate no acute toxicity, the permittee may request the permit issuing authority to allow the permittee to reduce the biomonitoring to quarterly acute toxicity testing on only one species. The permittee is to specify which species would be used in the testing. The permit issuing authority may approve or deny the request based on the biomonitoring results and other available information. If the request is approved, the test procedures are to be the same as specified above for the test species.

PART I

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B. Specific Limitations and Monitoring Requirements (Continued)

- 3. The permittee shall develop and implement a Best Management Practices (BMP) Plan which prevents, or minimizes the potential for, the release of toxic substances from ancillary activities to waters of the United States through plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. The Plan shall be developed within six months of the permit issuance and shall be implemented as soon as practicable, but not later than one year after the effective date of the permit. In addition to the general requirements of all BMP Plans, United Park City Mines Company shall be required to comply with the following Specific Conditions:
 - a. The permittee shall continue efforts to reduce the dispersion and migration of pollutants from the tailings pond site. These efforts shall include covering and revegetating parts of the site and diversion of snowmelt and stormwater runoff from the tailings pond, as well as containment of contaminated surface seepage from the toe and abutment of the tailings dam.
 - b. The permittee shall continue to divert as much water as possible from high zinc areas of the mine in an effort to reduce the dissolution of zinc from zinc-bearing ores.
- Orain Tunnel Creek if the pH of Outfall OOI drops below 8.2 for three consecutive days or if a known discharge of zinc in violation of the permit limitations occurs. Monitoring of the river for dissolved zinc, lead, and copper, and pH shall commence at the time of the known discharge of high zinc concentration or period of lowered pH and shall continue weekly for four weeks after the zinc concentration in Outfall OOI complies with permit limits or the pH of Outfall OOI increases to above 8.4. All monitoring shall be by grab samples. In addition, monitoring as described above shall be done weekly during periods when flow in the Provo River below the confluence with Drain Tunnel Creek is less than five times the flow from the mine, for a seven consecutive day period.

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- 5. There shall be no point source discharge of pollutants into Silver Creek or its tributaries resulting from the permittee's operations.
- 6. The permittee shall notify EPA and the State of Utah of the planned resumption of active operations prior to the production of ore and/or the operation of the mill. After the notice of active operations, the permit issuing authority will review the permit limitations in the context of BAT for metal mine drainage and current State standards, and will modify the permit as necessary.
- 7. The permittee shall comply with Best Management Practices for Mountainlands 208 planning area.
- 8. The permittee shall monitor Silver Creek and the five monitoring wells located below the tailings disposal site quarterly for the following parameters: total and dissolved zinc, total and dissolved lead, cyanide, total and dissolved manganese, TDS and pH.
- 9. The permittee shall continue to operate the mine water treatment system even if the zinc concentration in the raw mine water is below the effluent limitations unless the permittee can demonstrate that the pH of both the raw mine water and settling pond effluents are sufficiently high to prevent dissolution of precipitated zinc sludge in the settling ponds, and no whole effluent toxicity is demonstrated.

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II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

- A. Representative Sampling. Samples taken in compliance with the monitoring requirements established under Part I shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.
- B. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- C. Penalties for Tampering. The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- D. Reporting of Monitoring Results. Effluent monitoring results obtained during the previous month shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed reporting period. The first report is due on September 28, 1987. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the requirements of Signatory Requirements (see Part IV), and submitted to the Director, Water Management Division and the State agency at the following addresses:

original to: United States Environmental Protection Agency

Region VIII Denver Place

999 18th Street, Suite 500 Denver, Colorado 80202-2405

Attention: Water Management Division

Compliance Branch (8WM-C)

copy to:

Utah Department of Health

Bureau of Water Pollution Control

P.O. Box 16690

Salt Lake City, Utah 84116-0690

Other testing and monitoring requirements contained in Part I B4 and Part I B8 shall be submitted to the Utah Department of Health on a quarterly basis.

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- E. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.
- F. Additional Monitoring by the Permittee. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated.
- G. Records Contents. Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - The individual(s) who performed the sampling or measurements;
 - The date(s) analyses were performed;
 - 4. The individual(s) who performed the analyses;
 - 5. The analytical techniques or methods used: and.
 - 6. The results of such analyses.
- H. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time. Data collected on site, copies of Discharge Monitoring Reports, and a copy of this NPDES permit must be maintained on site during the duration of activity at the permitted location.
- Twenty-four Hour Notice of Noncompliance Reporting.
 - 1. The following occurrences of noncompliance shall be reported by telephone within 24 hours from the time the permittee becomes aware of the circumstances:
 - a. Any noncompliance which may endanger health or the environment;
 - b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G., Bypass of Treatment Facilities.);
 - c. Any upset which exceeds any effluent limitation in the permit (See Part III.H., Upset Conditions.); or,
 - d. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit to be reported within 24 hours.

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- 2. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected; and,
 - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- 3. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Compliance Branch, Water Management Division, Denver, Colorado, by phone, (303) 293-1589.
- 4. Reports shall be submitted to the addresses in <u>Part II.D.</u>, <u>Reporting of Monitoring Results</u>.
- J. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.D. are submitted. The reports shall contain the information listed in Part II.I.2.
- K. <u>Inspection and Entry</u>. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
 - 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and.
 - 4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

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III. COMPLIANCE RESPONSIBILITIES

- A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- B. Penalties for Violations of Permit Conditions. The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, or 308 of the Act is subject to a fine of not less than \$2,500, nor more than \$25,000 per day of violation, or by imprisonment for not more than 1-year, or both. Except as provided in permit conditions on Part III.G., Bypass of Treatment Facilities and Part III.H., Upset Conditions, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.
- C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permitee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit compliance.
- F. Removed Substances. Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be buried or disposed of in such a manner as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digestor supernatant and filter backwash shall not directly enter either the final effluent or waters of the United States by any other direct route.

PART III

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G. Bypass of Treatment Facilities:

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. and 3. of this section. Return of removed substances, as described in Part III.F., to the discharge stream shall not be considered a bypass under the provisions of this paragraph.

2. Notice:

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 60 days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under <u>Part II.I.</u>, Twenty-four Hour Reporting.
- 3. Prohibition of bypass.
 - a. Bypass is prohibited and the Director may take enforcement action against a permittee for a bypass, unless:
 - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,
 - (3) The permittee submitted notices as required under paragraph 2. of this section.
 - b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 3.a. of this section.

PART III

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H. Upset Conditions.

- 1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph 2. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required under Part II.I., Twenty-four Hour Notice of Noncompliance Reporting; and,
 - d. The permittee complied with any remedial measures required under Part III.D., Duty to Mitigate.
- 3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- I. Toxic Pollutants. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

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- J. <u>Changes in Discharge of Toxic Substances</u>. Notification shall be provided to the Director as soon as the permittee knows of, or has reason to believe:
 - 1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. One hundred micrograms per liter (100 ug/L);
 - b. Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or,
 - d. The level established by the Director in accordance with 40 CFR 122.44(f).
 - That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. Five hundred micrograms per liter (500 ug/L);
 - b. One milligram per liter (1 mg/L) for antimony:
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or,
 - d. The level established by the Director in accordance with 40 CFR 122.44(f).

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IV. GENERAL REQUIREMENTS

- A. Planned Changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - 1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29(b); or,
 - 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Part IV.A.1.
- B. Anticipated Noncompliance. The permittee shall give advance notice of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- C. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- D. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.
- E. Duty to Provide Information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
- F. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.

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- G. Signatory Requirements. All applications, reports or information submitted to the Director shall be signed and certified.
 - 1. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
 - c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.
 - 2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Director, and.
 - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
 - 3. Changes to authorization. If an authorization under paragraph IV.G.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph IV.G.2. must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

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4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- H. Penalties for Falsification of Reports. The Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- I. Availability of Reports. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution control agency and the Director. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.
- J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

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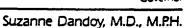
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- L. <u>Severability</u>. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- M. <u>Transfers</u>. This permit may be automatically transferred to a new permittee if:
 - 1. The current permittee notifies the Director at least 30 days in advance of the proposed transfer date;
 - The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
 - 3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2. above.
- N. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.

PART IV

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- O. Water Quality Standard Requirement Reopener Provision
 This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:
 - Water Quality Standards for the receiving water(s) to which the permittee discharges are modified in such a manner as to produce different effluent limits than contained in this permit.
 - 2. A final wasteload allocation is developed and approved by the State and/or EPA for incorporation in this permit.
 - 3. A revision to the current 208 plan is approved and adopted which calls for different effluent limitations than contained in this permit.

Norman H. Bangerter
Governor





Executive Director

September 23, 1986

MEMORANDUM TO: Dale D. Parker, Director

Bureau of Solid and Hazardous Waste

THROUGH:

Loretta Pickerell

Superfund Program Manager

FROM:

Muhammad A. Slam and John Trepanowski

Engineers

SUBJECT:

Rerouting of U.S. 40 Near Richardson Flat

The Bureau of Solid and Hazardous Waste (BSHW) staff held a meeting with United Park City Mines (UPCM) on September 22, 1986. The following persons participated in the meeting:

Mary Pat Bock

Muhammad A. Slam

John Trepanowski

E. L. Osika

WPCM

Kerry Gee

UPCM

Rosemary Beless . Fabian & Clendenin, Attorney

Background:

The Utah Department of Transportation (UDOT) is planning to reroute U.S. 40 near the Richardson Flat and Park City Landfill CERCLA sites. The original highway construction plan did not impact either of these sites. However, UDOT has revised their construction plans recently. The revised plan will substantially impact the CERCLA sites and a wetlands area near these sites.

Issues:

(1) The proposed new route of U.S. 40 will pass through the sanitary landfill. The sanitary landfill contains sewage sludge, domestic waste and, potentially, hazardous waste. UDOT is planning to move the landfilled waste, including sewage sludge, from the road path. The removed waste will be disposed in the highway berms at the landfill site and in the interchange, which is located in the nearby wetland area. This will require an NPDES permit under the Clean Water Act, according to Mr. Beless. Also a solid waste permit from BSHW will be required.

BSHW (CERCLA Section) is currently investigating the Park City Landfill as a potential Superfund site. A Preliminary Assessment for this site is scheduled to be conducted this quarter.

Kenneth L. Alkema, Director . Division of Environmental Health

As part of their landfill assessment, UDOT is planning to drill holes through the landfill. It is unclear whether UDOT understands the health and safety concerns associated with this action.

- (2) Richardson Flat is a potential Superfund site; the U.S. Environmental Protection Agency and the BSHW are currently investigating this site. The proposed plan calls for the road from U.S. 40 to Kamas (U.S. 189) to intersect the tailings dam. A substantial portion of the dam's toe will be removed by the road construction. This may impact on the stability of the tailings pond dam and may allow releases to the environment via several pathways, e.g., surface runoff and dam failures. If the highway construction did impact the site, UDOT and/or the U.S. Bureau of Reclamation may be considered a potentially responsible party (PRP) for this site.
- (3) UPCM has installed monitoring wells at Richardson Flat to comply with their NPDES permit. Two monitoring wells will be taken out of service if the proposed highway construction plan is implemented.
- (4) UDOT will drill some test borings in the area. If these borings are not plugged properly, it may lead to cross-contamination of a deeper aquifer, according to UPCM. Permits from DNR are required for these wells.
- (5) The U.S. 40 U.S. 189 interchange is proposed for a wetlands area of Silver Creek. Therefore, a 404 permit will be required for this portion of the project.

Recommendations:

It appears that UDOT and the Bureau of Reclamation have not considered all of the environmental issues mentioned above. A meeting of concerned parties listed below should be scheduled promptly to discuss and resolve these issues.

- 1. Bureau of Solid and Hazardous Waste
- 2. Bureau of Water Pollution Control
- 3. Bureau of Reclamation
- 4. Utah Department of Transportation

MS/pw

9024U/28-29

ANALYTICAL RESULTS REPORT OF AIR SAMPLING AT RICHARDSON FLAT PARK CITY, UTAH

TDD R8-8608-05
EPA ID: UTD980952840

EPA PROJECT OFFICER: PAULA SCHMITTDIEL

E&E PROJECT OFFICER: HENRY SCHMELZER

REVIEWED BY: KARL FORD

SUBMITTED TO: LES SPRENGER, FIT-RPO

DAVE SCHALLER, SITE EVALUATION CHIEF

DATE SUBMITTED: SEPTEMBER 19, 1986

DATE RESUBMITTED: SEPTEMBER 9, 1987

ANALYTICAL RESULTS REPORT FOR RICHARDSON FLAT TAILINGS PARK CITY, UTAH TDD #R8-8608-05

I. INTRODUCTION

This report was prepared to satisfy the requirements of Technical Directive Document (TDD) R8-8608-05 issued to Ecology and Environment's Field Investigation Team (E&E FIT) by Region VITI Environmental Protection Agency (EPA). This report addresses the analytical results for the air sampling activities conducted at the Richardson Flat Tailings site in Park City, Utah. FIT members conducting the air sampling during July 7-14, 1986 were Henry Schmelzer and Dave Franzen. Sampling procedures used in this investigation conform to the Region VIII FIT SOP for Hi-Vol Air Sampling at Hazardous Waste Site; the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II - Ambient Air Specific Methods; EPA-600/4-77-027A, May, 1977, U.S. EPA, Research Triangle Park, N.C.; and 40 CFR Part 58, July, 1983.

The overall scope of the project involved the set up and operation of a total of five high volume (hi-vol) air samplers at four sampling locations over a five day period. A total of twenty-nine samples were collected including four duplicates and five blanks. Site access was set up by Sue Kennedy of Ecology and Environment, and Kelcey Land and Matt Cohn of Region VIII EPA.

The objectives of this investigation were to determine if the migration of heavy metal contaminated suspended particulate matter exists and to further substantiate and complete the HRS air route score. This score was previously based on photo-documentation of wind blown tailings material.

II. SITE DESCRIPTION

Richardson Flat Tailings is located in Summit County, Utah approximately 3.5 miles northeast of Park City. The tailings cover approximately 160 acres in the NW 1/4, Section 1 and NE 1/4 of Section 2, Township 2 South, Range 4 East (Figure 1). Highway 40 runs east and north of the area, and a Union Pacific Railroad track bisects the southern portion of the tailings. Silver Creek is located approximately 500 feet from the northwestern most extension of the tailings. An intermittent stream (water diversion ditch) forms the southeastern border of the tailings. An ephemeral pond overlies the northwestern portion of the tailings, and is contained by a dam at the northwestern end.

III. SITE HISTORY

The mill tailings at Richardson Flat came from the Keetley Ontario Mine and other metal mines currently owned by United Park City Mines (UPCM). The most recent use of the area for tailings disposal was during the period of time from 1975 to 1981. During this time, UPCM had all its mining properties leased to either Park City Ventures or Noranda Mining, Inc. who constructed and operated milling facilities on UPCM property.

It is estimated that at least seven million tons of tailings were deposited on Richardson Flat. While there is no current dumping of tailings on site, Mr. Ray Wortley is leasing the land the tailings are on from UPCM and using the tailings material for sewer line and road base backfill.

The site is not secured in any way from public access. An unpaved county road along the southern boundary of the tailings is unrestricted. Cattle and sheep are grazed in the area, and cattle have been observed walking across the tailings.

On June 20, 1985, clouds of fugitive dust moving offsite as a result of strong winds from the west-northwest were photographed by the original EPA-FIT team doing the site investigation. Results of analyses of surface tailings samples showed concentrations as high as 3,600 ppm arsenic, 80 ppm cadmium, 8,530 ppm lead, and 6,360 ppm zinc. Mean soil concentrations for those metals in the western U.S. respectively are 5.5 ppm, 0.2 ppm, 17 ppm, and 55 ppm (Shacklette, 1984).

IV. METEOROLOGY

The Richardson Flat tailings lie in a small flat topographic basin of approximately 800 acres. The configuration of the basin was expected to have a pronounced effect on local air flow. The basin is situated at 6600 feet elevation and is surrounded by ridges of the Wasatch Mountains that range from 6700 feet to 7600 feet. Silver Creek enters the basin from the west-southwest then angles to the north. Daytime up valley air flows were anticipated to originate from the west northwest. This was found to be the case.

The data presented in the following section was acquired from The Climatic Atlas of the United States, U.S. Department of Commerce, Environmental Sciences Services Administration, Environmental Data Service, June 1968. The climate of the Park City area is characterized by moderate fluctuations in temperature and precipitation throughout the year. Mean monthly temperatures range from 10 degrees Fahrenheit (°F) in December, January, and February to 80°F in June, July and August. During the month of July the average temperature is approximately 60°F. Precipitation for the Park City area varies from a mean monthly amount of 1.00 inches in July to 2.22 inches in December. Prevailing wind direction at Park City is typically from a southeasterly direction throughout the year. Relative humidity for the Park City area varies from 40 percent in August to 80 percent in December and February. The average relative humidity in July is 50 percent. Barometric pressure ranges from 1022 millibars (30.18 inches of mercury) in December and January to approximately 1010 millibars (29.83 inches of mercury) in June.

IX. CONCLUSIONS AND RECOMMENDATIONS

Table 4 compares the airborne metal concentrations of downgradient versus upgradient sample locations by sample day. Lead released from daily downgradient sample location ranged from 2.28 to 102.35 times the upgradient sample location. Zinc ranged from 2.43 to 49.58. Arsenic ranged from 7.33 to 48.84. Cadmium ranged from 1.0 to 82.5. When compared to the remote background, the increases are even higher: 261.56 for lead and 91.67 for cadmium.

Strong winds observed on the evening of July 7 prompted a night-time sample run. Winds during this sampling period were the strongest observed during the field activities and lasted throughout the sampling period. This may account for the largest release occurring on the first sampling day.

Based upon the information presented in this analytical results report, it can be concluded that Richardson Flat Tailing site is the source of a release of hazardous substances to the air. Onsite soil concentrations of arsenic, cadmium, lead and zinc documented in previous reports are yielding substantial concentrations of suspended particulates containing these elements. These contaminated particulates are migrating into the air at downwind sample locations on a daily basis when compared to the upwind sample location. The same is true when comparing the downwind samples to those taken at the same times from the remote background location. Based on this information, it is recommended that the Hazard Ranking System documentation package be updated and supplied with the current information.

TABLE 1 RICHARDSON FLATS ARSENIC, CADMIUM, LEAD AND ZINC CONCENTRATIONS IN TOTAL ug/filter BY SAMPLE DAY

DAY 1	AM-06	AM-01	AM-04	AM-03 Blank	AM-02	AM-05A INITIAL LOCATION	1 T2 1
Arsenic Cadmium Lead Zinc		1.0u .5ur 3.4 17j	54 4.8r 959 672j	1.0u .5ur .5u .4uj	- 1.0u .5u 8.3 15j	17 5.2r 348 527j	-
DAY 2	BLANK						
Arsenic Cadmium Lead Zinc	1.0u .5ur .5u .4uj	1.0u .5ur 8.90 21j	1.5 .5ur 30 39j	1.4 .5ur 26 34j	6.8 .5ur 147 88j	1.0u .5ur 14 17j	
DAY 3	BLANK			····	·		
Arsenic Cadmium Lead Zinc	1.0u .5ur .5u .4uj	1.0u .5ur 12 23j	1.5 .5ur 36 43j	1.0u .5ur 25 28j	13 .8r 264 169j	1.4 .5ur 30 55j	
DAY 4	BLANK			ŗ			
Arsenic Cadmium Lead Zinc	1.0u .5ur .5u .4uj	1.0u .5ur 29 43j	1.0u .5ur 64 35j	1.2 .5ur 40 36j	6.6 .5ur 131 98j		
DAY 5	BLANK			<u> </u>			
Arsenic Cadmium Lead Zinc	1.0u .5ur .5u .4uj	1.0u .5ur 8.0 22j	1.5 .5ur 27 27j	1.0u .5ur 30 23j	1.8 .5ur 48 51j		

u Element is undetected. Detection limit given.

j Matrix spike recovery was 65% for cadmium. Actual value may be higher. relative percent of differences were out of CLP criteria for zinc.

r Matrix spike recovery for zinc was 60%. Values given are estimates.

TABLE 5 SOIL CONCENTRATION OF TASK 1 AND 2 METALS IN RICHARDSON FLAT AREA

	CNTY RD 2' SO-01	CNTY RD 10' SO-02	US40 2' S0-03	US40 50' SO-04	HOTEL SO-05	WE. U. AV
Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium	3790* 18e 87 95 .4ue 3.9* 46900* 17*	11900* 70e 7.7 200 5.2e 12* 14300* 443*	11300* 89e 7.5 144 43e 12* 12900* 743*	10500* 40e 2:1u 668 1.4e 4.5* 6350* 4.3*	13200* 104e 188 225 1.0e 38* 14900* 21*	- 55 - 55 - 5
Cobalt Copper Iron Lead	[2.9]e 21 10600 477*	14e 44 94200 133*	159e 100 10300 418*	11e 15 33900 13*	21e 222 46100 3479*	4: 7 2: 2: 1:
Magnesium Manganese Mercury Nickel Potassium	14200* 284 1.0* 12 [436]e	55800* 8320 0.5* 44 1480e	36700* 15400 0.2* 52 [965]e	3560* 112 0.5* 21 1160e	5550* 1730 3.9* 34 1960e	3:
Selenium Silver Sodium Thallium Vanadium Zinc	1.0u 2.0u [336] 2.4 11e 440*	1.0u 2.0u 5620 2.0u 561e 331*	1.0u 2.0u 5130 2.0u 1390e 84*	1.0u 2.1u [976] 2.1u 81e 96*	6.9 18 1320 13 12e 4630*	70 5.

Spike recovery beyond the \pm 25% control limit.

Duplicate results exceeded the relative percent difference limit of ±35%. Consider an estimate.

An interference may be present for these elements. Results is below CLP contract detection limit but above the detection limit instrument.

August 15, 1985

Robert L. Duprey
Director, Waste Management Division
United States Environmental Protection Agency
Region VIII
One Denver Place
Denver, Colorado 80202-2413

Re: Olsen/Niehart Reservoir, Mayflower Tailings, and Richardson Flats Sites

Dear Bob:

This is in response to EPA's Memorandum of July 31, 1985, regarding eligibility of the Olsen/Niehart Reservoir, Mayflower Tailings, and Richardson Flats sites for investigation and cleanup under the State's Abandoned Mine Reclamation Program (AMR). None of these sites is included in Utah's AMR program and, therefore, monies allocated to Utah for abandoned mine reclamation under the Surface Mining Control And Reclamation Act (SMCRA) are not budgeted for these sites.

Your letter correctly summarizes the statutory requirements for use of SMCRA monies in reclamation of non-coal sites. Utah incorporates these requirements in the State Abandoned Mine Reclamation Regulations:

AMR 875.12 Eligible lands and water.

Non-coal lands and water are eligible for reclamation if:

- (a) They were mined or affected by mining processes;
- (b) They were mined prior to August 1977, and left or abandoned in either an unreclaimed or inadequately reclaimed condition;

Robert L. Duprey August 15, 1985 Page 2

- (c) There is no continuing responsibility for reclamation by the operator, permittee, or agent of the permittee under statutes of the State or Federal Government or the State as a result of bond forfeiture. Bond forfeiture will render lands or water ineligible only if the amount forfeited is sufficient to pay the total cost of the necessary reclamation. In cases where the forfeited bond is insufficient to pay the total cost of reclamation, additional moneys from the Account may be sought;
- (d) The reclamation has been requested by the Governor;
- (e) The reclamation is necessary for the protection of the public health and safety or all coal related reclamation has been accomplished; and
- (f) Moneys allocated to the Division are available for the work.

Utah's Abandoned Mine Reclamation Plan addresses both coal and non-coal sites. Utah's allocation of SMRCA monies for the total program was about twenty-two million dollars through 1992. There are now approximately twelve million dollars remaining in the State's Abandoned Mine Reclamation Account.

Because of the large number of abandoned mines in Utah (87% non-coal) and the limited reclamation budget, the State plan establishes site selection and prioritization criteria which target principally sites posing immediate safety hazards. These sites generally encompass such hazards as open mine shafts, portals and adits; unstable high walls, mine fires and burning spoil piles, dangerous slide areas; mine gas buildups; water impoundments; subsidence areas; and unmarked mine pits. The plan stresses cost-effective use of reclamation funds at these sites and requires evaluation to determine the minimum amount of site reclamation needed to bring as many sites as possible to suitable land uses.

While abandoned mine sites posing environmental hazards are certainly eligible for reclamation activities under Utah's AMR authority, such sites are generally ranked below sites with high safety hazards. Unlike the remedial

Robert L. Duprey August 15, 1985 Page 3

program under the federal Comprehensive Environmental Response Compensation And Liability Act (CERCLA), Utah's AMR program is not oriented to provide detailed investigation of releases of hazardous substances, nor is it sufficiently funded to provide for comprehensive site-specific environmental cleanups.

We hope that this information is helpful. If you have any further questions, please do not hesitate to contact us.

Sincerely,

KENNETH L. ALKEMA

Director

Division of Environmental Health

Sepel for

ZDIANNE R. NIELSON

Director

Division of Oil, Gas and Mining

ANALYTICAL RESULTS REPORT RICHARDSON FLAT TAILINGS SUMMIT COUNTY, UTAH

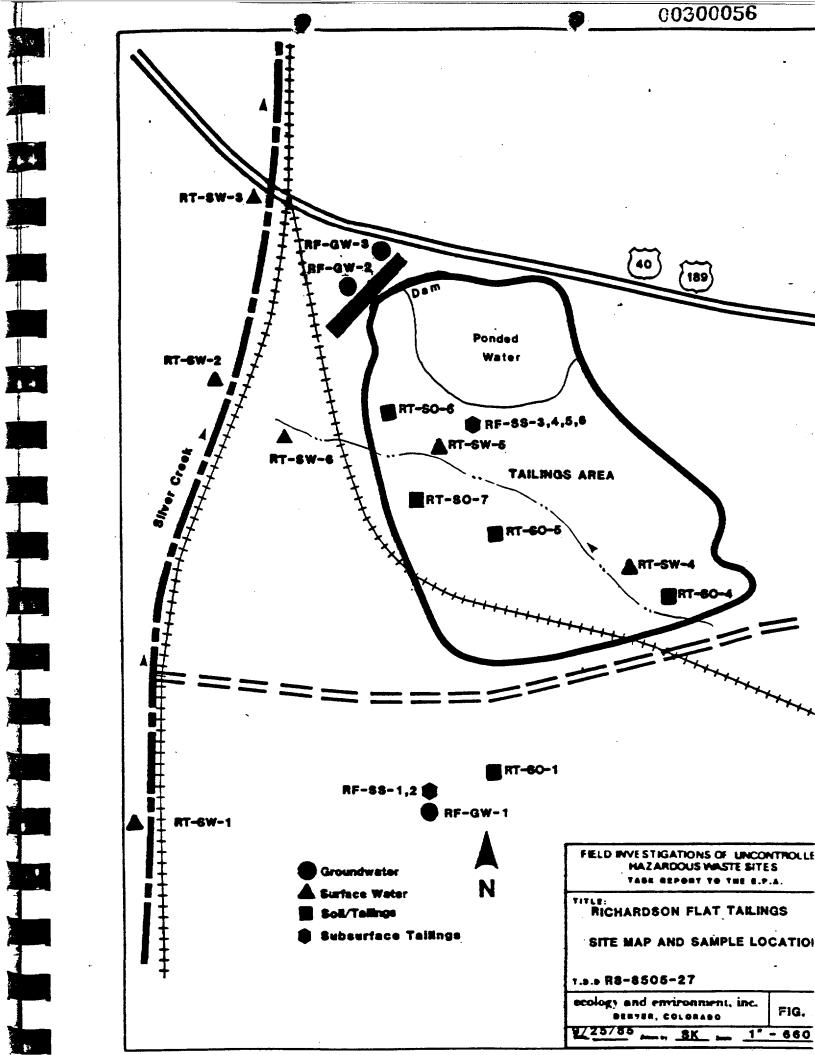
TDD R8-8508-07

EPA REGIONAL SITE PROJECT OFFICER: ERIC JOHNSON

E&E PROJECT OFFICER: SUSAN KENNEDY REVIEWED BY KARL FOLD

SUBMITTED TO: KEITH SCHWAB, FIT-DPO
WILLIAM GEISE, REM-FIT COORDINATOR

DATE SUBMITTED: OCTOBER 25, 1985



C. SOIL AND TAILINGS SAMPLES

Analytical data for surface tailings samples (RT-SO-4, RT-SO-5, RT-SO-6 and RT-SO-7) reveal elevated concentrations of arsenic, cadmium, calcium, copper, lead, magnesium, mercury, silver, sodium and zinc, as compared to the off-site background soil sample (RT-SO-1). Elevated levels of the above constituents are typical in metal mine tailings, however, the off-site background soil sample contains substantially higher levels of arsenic, cadmium, lead, mercury and zinc as compared to mean concentrations for the Western United States (Table 4). Wind-blown tailings material is probably the primary source of contamination to nearby off-site surface soil. This idea is substantiated by comparison of the background surface soil sample data (RT-SO-1) to subsurface soil data (RF-SS-1, RF-SS-2). Most of the elemental constituents are elevated in the surface soil, but are greatly reduced in subsurface soil samples.

Data from subsurface tailings samples RF-SS-3, RF-SS-4 and RF-SS-5 indicate downward migration of antimony, arsenic, cadmium, copper, lead, magnesium, mercury, silver, sodium and zinc. As a result, soil beneath the tailings (RF-SS-6) contains elevated concentrations of all of the above constituents. Subsurface tailings data are presented in Table 5.

IV. SUMMARY

Although other upstream tailings or mining operations may be contributing inorganic contaminants to Silver Creek, a significant increase in surface water lead concentrations can be attributed to Richardson Flat Tailings. Water from Silver Creek is used for local irrigation.

A significant release of arsenic, cobalt, iron, manganese and zinc to downgradient ground water was demonstrated. However, hydrologic continuity between the contaminated aquifer and current drinking water sources is unlikely. Any expansion of the Park City water supply should be thoroughly evaluated based on these findings.

Surface and subsurface tailings material contain high concentrations of heavy metals and arsenic. Subsurface tailings sample data indicate downward movement of contaminants in the solid matrix.

Elevated levels of metals and arsenic in nearby off-site soil may be attributed to wind-blown tailings from Richardson Flat.

V. RECOMMENDATIONS

- 1. An observed release of contaminants to the air route was scored based on photo-documentation of air-borne tailings material during collection of surface tailings sample (RT-SO-7). It is recommended that high-volume air sampling be conducted at the site to further substantiate and complete the HRS package.
- 2. Because the tailings material contains high concentrations of metals and arsenic, the area should be fenced to prevent on-site grazing by domestic sheep and cattle, and to keep people off the site.
- 3. Further surface water and sediment sampling is recommended to fully assess the hazard associated with irrigating area pasture land with water diverted directly downstream from Richardson Flat.

TABLE 1. ANALYTICAL DATA FOR UNFILTERED GROUND WATER SAMPLES COLLECTED AT RICHARDSON FLAT TAILINGS, UTAH. (Results in ug/l, ppb)

Parameter	Hole #1 RF-GW-1 Totals	UPCM #2 RF-GW-2 Totals	UPCM #1 RF-GW-3 Totals	UPCM #1 RF-GW-4 Totals	Drinking Water Criteria
TASK 182 METALS				•	
Aluminum	1,040	4,920	80,700	83,400	5,000(c)
Antimony	<5	63sc	< 5	<5	146(b)
Arsenic	હેં	349sc	78	70	50(a)
Barium	83	2.665sc	1,534	1.354	1,000(a).
Beryllium	<10	<10	<10	<10	0.037(b)
Cadmium	<5	16	42	48	10(a)
Calcium*	45	314	352	332	
Chromium:	ζ5	42	98	104	50(a)
Cobalt	₹5	80	46	48	,-,
Copper	<5	190	1.583	1,350	1,000(b)
Iron	958	26,300	126,000	130,000	700(a)
Lead	<30	1,080	588	527	50 (a)
Magnesium*	9.9	72	88	85	` ,
Manganese	20	10,400	2,230	2,070	50(a)
Mercury	<0.1	0.1	0.70	0.60	2.0(a)
Nickel	<30	30	88	82	13.4(b)
Potassium					• • •
Selenium	<5	<5	<5	<5	10(a)
Silver	<5	17	<5	<5	50(a)
Sodium*	16	54	44	44	
Thallium	<100	<100	<100	<100	13(b)
Tin					• •
Vanadium	<10	17	262	266	
Zinc	<5	2,790	65 0	569	5,000(b)
TASK 3 METAL					
Cyanide	<10	200	<10	<10	20 0(c)
SPECIAL ANION Sulfate*	35	775	625	1,025	250,000(c)

^{*}mg/1 or ppm

TABLE 2. ANALYTICAL DATA FOR FILTERED GROUND WATER SAMPLES COLLECTED AT RICHARDSON FLAT TAILINGS, UTAH. (Results in ug/l, ppb)

Parameter	Hole #1 RF-GW-1 Dissolved	UPCM #2 RF-GW-2 Dissolved	UPCM #1 RF-GW-3 Dissolved	UPCM #1 RF-GW-4 Dissolved
TASK 142 METALS				*
Aluminum	<30	<30	<30	<30
Antimony	₹5	<5	3 5	<5
Arsenic	(5	Ĩý	< 5	و
Barium	78	99	104	104
Beryllium .	<10	<10	<10	<10
Cadmium	`<5	₹5	< 5	₹ 5
Calcium*	47	307	254	254
Chromium	< 5	<5	~ 5	<5
Cobalt	₹5	67	10	10
Copper	~ 5 •	<5	<5	< 5
Iron	<10	14,800	376	300
Lead	<30	<30	<30	< 3 0
	9.8	70	56	56
Magnesium*			924	903
Manganese	11	9,990		
Mercury	- <0.1	<0.1	<0.1	<0.1
Nickel	<30	· <30	<30	<30
Potassium	45	10	,,	16
Selenium	<5	(5	<5	<5
Silver	<5	<5 50	<5	<5
Sodium*	16	52	42	44
Thallium	<100	<100	<100	<100
Tin				
Va nadium	<10	<10	<10	<10
Zinc	6	144	<5	<5

TASK 3 METAL Cyanide

*mg/l or ppm

TABLE 3. ANALYTICAL DATA FOR SURFACE WATER COLLECTED AT RICHARDSON FLAT TAILINGS, UTAH. (Results in ug/l, ppb)

	Upstream SC	Midstream SC	Downstream SC	Southeast IS	Mid IS	West IS
Parameter	RT-SW-1	RT-SW-2	RT-SW-3	RT-SW-4	.RT-SW-5	RT-SW-6
TASK 142 METALS	Total	Total	Total	Total	Total	Total
Aluminum	172	77 :	370	450	<30	35
Antimony	21	15	35	19	13	. 7
Arsenic	14	11	65	33	27	12
Barium	36	41	53	119	26	27
Beryllium	<10	<10	<10	<10	<10	<10
Cadmium	<5	<5	<5	<5	<5	< 5
Calcium	137,000	119,000	124,000	128,000	252,000	287,000
Chromium	<5	<5	<5	<5	<5	<5
Cobalt	<5	<5_	< 5	<5	<5	<5
Copper	12	9	60	18	<5	<5
Iron	725	389	2,290	1,570	507	215
Lead	147	93	1,985	237	42	<30
Magnesium	22,200	24,000	26,000	35,400	55,400	59,200
Manganese	764	434	727	602	1,654	2,566
Mercury	0.2	0.1	0.57	0.1	<0.1	<0.1
Nickel	<30	<30	<30	<30	<30	<30
Potassium	40	/6				/e ·
Selenium	<5	(5	< 5	<5	<5	<5
Silver	<5	<5 25 406	<5 25, 200	<5 36 500	<5 20. 202	<5 27, 200
Sodium	31,700	25,600	25,200	36,500	29,000	37,300
Thallium Tin	<100	<100	<100	<100	<100	<100
Vanadium	<10	<10	<10	<10	<10	<10
Zinc	2,690	1,650	2,730	350	1,410	812
SPECIAL ANION						
Sulfate	284	222	210	218	963	909
Chloride	47	27	28	50	40	33
рH	7.33	7.54	7.47	7.26	7.40	7.40
Conductivity**	600	600	550	70 0	1,200	1,400
Temperature *C	21	21	19	20	21	21

SC - Silver Creek
IS - Intermittent Stream
** - umhos/cm

TABLE 4. ANALYTICAL DATA FOR SURFACE SOIL AND TAILINGS SAMPLES COLLECTED AT RICHARDSON FLAT TAILINGS, UTAH. (Results in ug/g, ppm)

Parameter	Background Soil RT-SO-1	Southeast Tailings RT-SO-4	Middle Tailings RT-SO-5	Northwest Tailings RT-SO-6	North Tailings RT-SO-7	Mean for Western US*
TASK 182 METALS						
Aluminum	14,400	3,440	863	794	1,340	58,000
Antimony	39	<200	<200	<400	₹300	0.47
Arsenic	58	3,600	1,500	900	600	5.5
Bartum	178	105	58	6.2	27	580
Beryllium	<1.6	<1.9	<1.4	<1.8	<1.5	0.68
Cadmium	17	47	40	80	58	0.2
Calcium	8,200	45,600	49,500	16,900	75,200	
Chromium	24	60	15	7.8	19	41
Cobalt	11	6.9	2.3	<0.9	1.5	7.1
Copper	94	227	181	371	961	21
Iron	24,000	30,700	19,900	154,000	106,000	21,000
Lead	1,110	3,320	2,650	7,010	8,530	17
Magnesium	4,990	14,600	15,300	3 ,9 60	13,100	
Manganese	879	1,650	1,810	510	5,150	380
Mercury	0.59	1.70	2.61	0.14	0.50	0.05
Nickel	12	59	5.2	9.6	16	15
Potassium						
Selenium	<16	<20	<30 0	<400	<300	0.23
Silver	6.7	20	19	24	22	0.2
Sodium	1,020	3,470	2 ,96 0	3,280	2,280	
Thallium	<16	<19	<14	<18	<15	0.2
Tin						
Vanadium	37	9.1	3.5	4.8	6.5	70
Zinc	1,570	6,360	5,400	5,870	3,780	55
% Solids	97.4	95.8	96.9	9 0.6	93.7	

^{*} Reference f

TABLE 5. ANALYTICAL DATA FOR SUBSURFACE SOIL AND TAILINGS SAMPLES COLLECTED AT RICHARDSON FLAT TAILINGS, UTAH. (Results in ug/g, ppm)

Parameter	Soil 5-7' RF-SS-1	Soil 10-12' RF-SS-2	Oxidized Tailing RF-SS-3	Reduced Tailings RF-SS-4	Tailings/ Soil Contact RF-SS-5	Soil beneath Tailings RF-SS-6
TASK 182 METALS			•			
Aluminum	16,900	16,700 °	844	484	1410	12,400
Antimony	(1	ંવ	31	49	171	14
Arsenic	6.5	6.3	311	328	- 218	34
Barium	125	147	31	86	64	235
Beryllium	<2	<2	<2	<2	<2	<2
Cadmium	6.8	7.4	53	169	61	15
Calcium	6,190	5,020	81,600	117,000	54,200	9,200
Chromium	19	19	6.3	16	14	15
Cobalt	8.7	9.5	<1	<1	4.5	16
Copper	14	17	225	225	335	105
Iron	18,500	19,700	80,800	68,000	22,600	15,100
Lead	37	37	2,770	4,720	4,920	1,090
Magnesium	6,240	7,620	11,100	12,900	13,300	4,530
Manganese	471	625	5,990	5,880	1,630	1,220
Mercury	<.05	<.05	0.94	1.97	2.26	0.40
Nickel	21	2 2	7	<6	<6	16
Potassium						
Selenium	<1	<1	1.0	<1	9.4	1.3
Silver	<1	<1	7.9	13	26	6.9
Sodium	308	27 9	2,230	11,300	6,100	1,010
Thallium	<20	<20	<20	<20	<20	<20
Tin						
Vanadium	31	28	3.1	<2	5.4	30
Zinc	. 70	44	3,980	23,200	12,700	1,510
% Solids	79.2	77.4	86.4	88.3	88.9	79.1
Task 3 Metal						
Cyanide	<0.4	<0.4	<0.4	5.2	<0.3	

Kenneth Lee Alkems, D Room 474 801-533-

Scott M. Matheson Governor

STATE OF UTAL DEPARTMENT OF HEALTH DIVISION OF ENVIRONMENTAL HEALTH

150 West North Temple, P.O. Box 2500, Salt Lake City, Utah 84110-2500



James O. Mason, M.D., Dr.P.H. Executive Director 801-533-6111

DIVISIONS

Community Health Services Environmental Health Family Health Services Health Care Financing

OFFICES

Administrative Services Community Health Nursing Management Planning Medical Examiner State Health Laboratory August 15, 1984

Mr. Eric Johnson U.S. Environmental Protection Agency Region VIII 1860 Lincoln Street Denver, Colorado 80295

Subject: Preliminary Assessment Report Richardson Flat Tailings,

Summit County Utah

Dear Mr. Johnson:

Submitted herewith is a final preliminary assessment report for the Richardson Flat tailings.

Based upon information available at the time this assessment was made, it is recommended that this site be given a medium priority and that a site inspection be performed during the third quarter of 1984.

Richardson Flat tailings are located between Park City and Keetley Junction. The exact amount of tailings on-site is unknown. But it is estimated that there are approximately 7 million tons of tailings most likely deposited in the late 60's and early 70's.

The mill tailings at Richardson Flat came from the Ontario Keetley mine and other mines owned by United Park City mines. The tailings are next to Silver Creek and numerous small tributaries flow through the tailings. Mr. Ray Wortey is currently leasing the tailings from United Park City mines and is using the tailings as backfill for sewer lines and road base.

During the site inspection samples will be collected from surface water, groundwater (if found) and from the tailings. If you have any questions please contact Don Verbica.

Sincerely,

Dale D. Parker, Ph.D. Executive Secretary Utah Solid and Hazardous Wastes Committee



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EPA FORM 2070-12(7-81)

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 1 - SITE INFORMATION AND ASSESSMENT

I.	IDENT	[FIC	CATIO	N
01	STATE	02	SITE	NO

II. SITE NAME AND LOCATION	
Ol SITE NAME (Logo, common or descriptive na	ome of site)
Richardson's Flat Tailings	
02 STREET, ROUTE NO. OR SPECIFICATION LOCATI	ON IDENTIFIER O3 CITY
NW 1/4 Sec 1 T25 R4E	Park City East Quadrangl
04 STATE 05 ZIP CODE 06 COUNTY	07 COUNTY CODE 08 CONG DIST.
Utah Summit	043 3
09 COORDINATES LATITUDE LONGITUDE	
40 40 42. 111 27 05.	•
10 DIRECTIONS TO SITE (Starting from nearest	public road)
Take I80 east from Salt Lake City. Turn sou	th on Heber exit to Keetley June, site is
approximately 2000' southeast of Keetley on	south side of road next to Park City's
landfill.	
III. RESPONSIBLE PARTIES	
Ol OWNER (if known)	02 STORET (Business mailies residential)
Noranda (Park City Ventures)	02 STREET (Business, mailing, residential) P.O. Box 1450
03 CITY 04 STATE	05 ZIP CODE 06 TELEPHONE NUMBER
Park City Utah	(801)649-9414
07 OPERATOR (if known and different from own	
Park City Ventures	(CL).
08 STREET (Business, mailing, residential)	09 CITY 10 STATE
P.O. Box 1450	Park City Utah
11 ZIP CODE 12 TELEPHONE NUMBER	
(801)649-9414	
13 TYPE OF OWNERSHIP (Check one)	
X A. PRIVATE B. FEDÉRAL:	C. STATE
D. COUNTY E. MUNICIPAL F. OTHER:	
	(Specify)
14 OWNER/OPERATOR NOTIFICATION ON FILE (Chec	ek all that apply)
A. RCRA 3001 DATE RECEIVED / /	PATE DESCRIVED / /
B. UNCONTROLLED WASTE SITE (CERCLA 103c)	DATE RECEIVED/_/
X C. NONE IV CHARACTERIZATION OF POTENTIAL HAZARD	
Ol ON SITE INSPECTION BY (Check all that app	lv)
X YES DATE 06/04/84	A. EPA B. EPA CONTRACTOR
NO X	C. STATE D. OTHER CONTRACTOR
	E. LOCAL HEALTH OFFICIAL
	F. OTHER:
	(Specify)
CONTRACTOR NAME(•
02 SITE STATUS (check one)	
A. ACTIVE X B. INACTIVE	C. UNKNOWN
03 YEARS OF OPERATION	
	NDING YEAR UNKNOWN
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESEN	
The mine tailings at Richardson flat came fr	
are next to Silver Creek and numerous small	
Mr. Ray Wortley leases the tailings and is u	ising them as backfill for sewer lines.

₽A

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION O1 STATE O2 SITE NC

IV CHARACTERIZATION OF POTENTIAL HAZARD

O5 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
The tailngs contain high levels of lead, arsenic and cadmium which are leachable and could migrate into the surface and groundwater.

V PRIORITY ASSESSMENT

Ol PRIORITY FOR INSPECTION (Check one, if high or medium is checked, complete Part 2 Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

A. HIGH X B. MEDIUM

(inspection required promptly) (inspection required)

C. LOW D. NONE

(inspect on time available basis) (No further action needed, complete current

disposition form)

VI INFORMATION AVAILABLE FROM

Ol CONTACT O2 OF (Agency, Organization) O3 TELEPHONE NUMBER

Don Verbica USHD/BSHW (801)533-4145

04 PERSON RESPONSIBLE FOR ASSESSMENT 05 AGENCY 06 ORGANIZATION 07 TELEPHONE NO.
Dale Parker USHD BSHW (801)533-4145

08 DATE

07/13/84

EPA FORM 2070-12(7-81)

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 2 - WASTE INFORMATION

I. IDENTIFICATION O1 STATE O2 SITE NO

TT WASTE S	STATES, QUANTI	TIES AND	CHAPACTERIST	TCC		
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BAS E MES H IV. HAZARDO	BASES BAVY METALS DUS SUBSTANCES O2 SUBSTANCE	03 CAS	ndix formost 04 STORAGE/	frequently 05 CONCENT	cited CAS Nur RATION 06 MEAS	SURE OF
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BAS E MES H IV. HAZARDO O1 CATEGORY	BASES EAVY METALS DUS SUBSTANCES 02 SUBSTANCE NAME Lead	03 CAS NUMBER 999	ndix formost 04 STORAGE/ DISPOSAL METHOD SI	frequently 05 CONCENTI 31.8 ppm s	cited CAS Nur PATION O6 MEAS CONCE surface water	SURE OF ENTRATION (total metals)
BAS E MES H IV. HAZARDO O1 CATEGORY MES MES	BASES HEAVY METALS DUS SUBSTANCES 02 SUBSTANCE NAME Lead cadmium	03 CAS NUMBER 999 999	ndix formost 04 STORAGE/ DISPOSAL METHOD SI SI	frequently 05 CONCENTI 31.8 ppm s .120 ppm s	cited CAS Nur RATION 06 MEAS CONCE surface water surface water	SURE OF ENTRATION (total metals) (total metals)
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BAS E MES H IV. HAZARDO O1 CATEGORY MES MES	BASES HEAVY METALS DUS SUBSTANCES 02 SUBSTANCE NAME Lead cadmium	03 CAS NUMBER 999 999	ndix formost 04 STORAGE/ DISPOSAL METHOD SI SI	frequently 05 CONCENTI 31.8 ppm s .120 ppm s	cited CAS Nur RATION 06 MEAS CONCE surface water surface water	SURE OF ENTRATION (total metals) (total metals)
BAS EMES HIV. HAZARDO	BASES EAVY METALS DUS SUBSTANCES O2 SUBSTANCE NAME Lead cadmium arsenic	03 CAS NUMBER 999 999 999	ndix formost 04 STORAGE/ DISPOSAL METHOD SI SI SI	frequently 05 CONCENTI 31.8 ppm s .120 ppm s	cited CAS Nur RATION 06 MEAS CONCE surface water surface water	SURE OF ENTRATION (total metals) (total metals)
BAS E MES H IV. HAZARDO O1 CATEGORY MES MES IOC V. FEEDSTOO	EAVY METALS US SUBSTANCES O2 SUBSTANCE NAME Lead cadmium arsenic	03 CAS NUMBER 999 999 999	ndix formost 04 STORAGE/ DISPOSAL METHOD SI SI SI	frequently 05 CONCENTI 31.8 ppm s .120 ppm s .40 ppm s	cited CAS Nur PATION O6 MEAS CONCE surface water surface water urface water	SURE OF ENTRATION (total metals) (total metals) (total metals)
BAS E MES H IV. HAZARDO O1 CATEGORY MES MES IOC	EAVY METALS US SUBSTANCES O2 SUBSTANCE NAME Lead cadmium arsenic CKS (See Appen O1 FEEDSTOCK	03 CAS NUMBER 999 999 999 999	ndix formost 04 STORAGE/ DISPOSAL METHOD SI SI SI	frequently 05 CONCENTI 31.8 ppm s .120 ppm s	cited CAS Nur PATION 06 MEAS CONCE surface water surface water urface water	CURE OF ENTRATION (total metals) (total metals) (total metals)
BAS E MES H IV. HAZARDO O1 CATEGORY MES MES IOC V. FEEDSTOO CATEGORY	EAVY METALS US SUBSTANCES O2 SUBSTANCE NAME Lead cadmium arsenic	03 CAS NUMBER 999 999 999	ndix formost 04 STORAGE/ DISPOSAL METHOD SI SI SI	frequently 05 CONCENTI 31.8 ppm : .120 ppm : .40 ppm st	cited CAS Nur PATION O6 MEAS CONCE surface water surface water urface water	SURE OF ENTRATION (total metals) (total metals) (total metals)
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BAS E MES F IV. HAZARDO O1 CATEGORY MES MES IOC V. FEEDSTOO CATEGORY FDS FDS FDS VI. SOURCES analysi	EAVY METALS DUS SUBSTANCES O2 SUBSTANCE NAME Lead cadmium arsenic CKS (See Appen O1 FEEDSTOCK NAME	03 CAS NUMBER 999 999 999 001 002 CAS NUMBER 00N (Cite s	ndix formost 04 STORAGE/ DISPOSAL METHOD SI SI SI SI SI SI SI SI	31.8 ppm s .120 ppm s .40 ppm s CATEGORY FDS FDS FDS	Cited CAS Nur PATION 06 MEAS CONCE Surface water Surface water urface water 01 FEEDSTOCK NAME	CURE OF ENTRATION (total metals) (total metals) (total metals) (total metals)
BAS E MES F IV. HAZARDO O1 CATEGORY MES MES IOC V. FEEDSTOO CATEGORY FDS FDS FDS VI. SOURCES analysi	EAVY METALS US SUBSTANCES OZ SUBSTANCE NAME Lead cadmium arsenic CKS (See Appen O1 FEEDSTOCK NAME	03 CAS NUMBER 999 999 999 001 002 CAS NUMBER 00N (Cite s	ndix formost 04 STORAGE/ DISPOSAL METHOD SI SI SI SI SI SI SI SI	31.8 ppm s .120 ppm s .40 ppm s CATEGORY FDS FDS FDS	Cited CAS Nur PATION 06 MEAS CONCE Surface water Surface water urface water 01 FEEDSTOCK NAME	CURE OF ENTRATION (total metals) (total metals) (total metals) (total metals)

EPA FORM 2070-12(7-81)

* Tonage based on 160 acres 20 feet thick

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POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 3 - SITE INFORMATION AND ASSESSMENT

I.	IDENT:	FIC	CATIO	N
01	STATE	02	SITE	NO

THE DESCRIPTION AND ACCOUNTY
TT LIAZABDOUG CONDITIONS AND INSTRUME
II. HAZARDOUS CONDITIONS AND INCIDENTS Ol A. GROUNDWATER CONTAMINATION O2 OBSERVED (DATE:) X POTENTIAL
01 A. GROUNDWATER CONTAMINATION 02 OBSERVED (DATE:) X POTENTIAL 03 POPULATION POTENTIALLY AFFECTED: 10,000 ¹ * ALLEGED
04 NARRATIVE DESCRIPTION
Potential exists for the contamination of groundwater. The tailings lie next to Silver
Creek and sit on top of old stream sediments (sands and clays). The water table is
relatively high due to Silver Creek. The tailings are porous and could be leached, the
resulting leachate could migrate into the groundwater.
01 B. SURFACE WATER CONTAMINATION 02 OBSERVED (DATE:) X POTENTIAL
03 POPULATION POTENTIALLY AFFECTED: 10,0001* ALLEGED
04 NARRATIVE DESCRIPTION
Potential exists for the contamination of surface water. Many samll tributaries of
Silver Creek flow through the tailings and from a pond. Silver Creek lies due west of
the site and could be effected by any leachate forming on the tailings.
O1 C. CONTAMINATION OF AIR O2 OBSERVED (DATE:) X POTENTIAL ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 10,000 ² * 04 NARRATIVE DESCRIPTION
Potential exists for contamination of air. The tailing consists of small particles
that are easily air borne. Pictures taken of site show tailings blowing off-site. The
tailngs contain lead and cadmium which could be harmful if ingested.
O1 D. FIRE/EXPLOSIVE CONDITIONS O2 OBSERVED (DATE:) POTENTIAL
03 POPULATION POTENTIALLY AFFECTED: ALLEGED
04 NARRATIVE DESCRIPTION
Not applicable
O1 E. DIRECT CONTACT O2 OBSERVED_(DATE:) X POTENTIAL ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 9503 04 NARRATIVE DESCRIPTION
Potential exists for direct contact. There is no fence or guard to prevent people from
entering the tailings pond.
O1 F. CONTAMINATION OF SOIL O2 OBSERVED (DATE:) X POTENTIAL ALLEGED
03 AREA POTENTIALLY AFFECTED: unknown 04 NARRATIVE DESCRIPTION
Potential exists for contamination of soil. The tailings are porous and so is the surround soil. The soil has been in continous contact with the tailings for a number
of years. Any leachate formed by the tailings could have contaminated the soil.
or years. They reactable formed by the tarrings could have contained the source
O1 G. DRINKING WATER CONTAMINATION O2 OBSERVED (DATE:) POTENTIAL
03 POPULATION POTENTIALLY AFFECTED: 10,000 ¹ ALLEGED
04 NARRATIVE DESCRIPTION
Potential exists for contamination of drinking water by the migration of leachate.
ALL COCK
OI H. WORKER EXPOSURE/INJURY O2 OBSERVED (DATE:) POTENTIAL ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 0 04 NARRATIVE DESCRIPTION Mr. Ray Wortley has a lease on the mine tailings and is removing them for use in
construction. A few workers load the tailings into dump trucks on-site. These workers
could be affected if the tailings are harmful.
TOTAL TO ALLOUDE EL GIO GALLELIGO GAO HUARRIGA.
Ol I. POPULATION EXPOSURE/INJURY O2 OBSERVED (DATE:) POTENTIAL ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 9503 04 NARRATIVE DESCRIPTION
The nearest large population is Park City which is approx. 2 miles from site. There is
no means on-site to prevent direct access by the local population.

EPA FORM 2070-12(7-81)1 = 3 mile radius; 2 = 4 mile radius; 3 = 1 mile radius

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EPA FORM 2070-12(7-81)

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 3 - SITE INFORMATION AND ASSESSMENT

	IDENT]			
01	STATE	02	SITE	N

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)
Ol J. DAMAGE TO FLORA O2 OBSERVED (Date:) X POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION
Potential exists for damage to Flora. Grass and shrubs will not grow on the mine
tailings.
O1 K. DAMAGE TO FAUNA O2 OBSERVED (DATE:) X POTENTIAL ALLEGED
04 NARRATIVE DESCRIPTION
Potential exists for damage to fauna. Beaver and muskrats live near the site on Silve
Creek. Silver Creek is a 3A (water quality) stream, it is a tributary of the Weber
River which is a trout stream.
Ol L. CONTAMINATION OF FOOD CHAIN O2 OBSERVED (DATE:) POTENTIAL
04 NARRATIVE DESCRIPTION ALLEGED
Potential exists for contamination of food chain (grass and roots) of beaver and
muskrats that live and eat on Silver Creek. Crops that are irrigated by Silver Creek
could also be contaminated.
01 M. UNSTABLE CONTAINMENT OF WASTES 02 OBSERVED (Date:) POTENTIAL
(Soils/runoff/standing liquids/leaking drums) ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 950 ³
04 NARRATIVE DESCRIPTION
Potential exists for unstable containment of waste. Tailings have been observed
blowing off-site.
DIOWING OFF-Site.
O1 N. DAMAGE TO OFFSITE PROPERTY O2 OBSERVED (DATE:) POTENTIAL
04 NARRATIVE DESCRIPTION ALLEGED
It is alleged that off-site property is being contaminated. Tailings were found on the
north side of the highway and they most liekly came from Richardson's Flat.
THOILT SIDE OF CHE Highway and they most literly came from Michardson 3 file.
Ol O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs O2 OBSERVED (DATE:)
04 NARRATIVE DESCRIPTION POTENTIAL ALLEGED
Unknown at the time this assessment was made.
Olivinali at the time time assessingly and made.
Ol P. ILLEGAL/UNAUTHORIZED DUMPING O2 OBSERVED (DATE:) POTENTIAL
04 NARRATIVE DESCRIPTION ALLEGED
Unknown at the time this assessment was made.
OUNTIONIT AT THE CHIE CHIE ASSESSMENT WAS MADE.
05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLEGED HAZARDS
DESCRIPTION OF HAT OFFICE RECOMMY, FOREIGNED FIREBRIDE
III. TOTAL POPULATION POTENTIALLY AFFECTED:
IV COMMENTS
State files
State :TTE2
V. SOURCES OF INFORMATION (Cite specific references, e.g., state files,
sample analysis, reports)
Sampte quathores tehnics

RICHARDSON'S FLAT TAILINGS Summit County, Utah

Richardson Flat tailings are located in the NW 1/4 of section 1, T25, R4E, of the Park City East, Quadrangle, between Park City and Keetley Junction. The exact amount of tailings on—site is unknown. But it is estimated that there are approximately 7 million tons of tailings most likely deposited in the late 60's and early 70's.

The mill tailings at Richardson's Flat came from the Ontario Keetley mine and other mines owned by United Park City Mines. The tailings are next to Silver Creek and numerous small tributaries flow through the tailings.

Mr Ray Wortley is currently leasing part of the tailings from United Park City Mines and is using the tailings as backfill for sewer lines and roadbase.

During the June inspection samples were taken from ground water, surface water and tailings. Ground water concentrations of arsenic at .325 ppm., cadmium at .120 ppm, lead at 31.8 ppm and mercury at 0.26 ppm were found in a spring below Richardson's Flat. It was observed during the inspection that tailings were being blown off—site.

The site has been scored and submitted to EPA for consideration for future NPL updates. The United Park City Mines has been notified of NPL potential and the risk of using the tailings for off site fill.

Indea Flat Task.

Facility name: Richardson Flat Tailings 60300071
Location: NW1/4 Sec 1 T25 R4E
EPA Region:
Person(s) in charge of the facility: United Park City Mines
309 Kerns Bldg
Salt Lake City, 1.17 nh 84101
Name of Reviewer: Susan Konneday Date: 10/11/85
General description of the facility: (For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the
Richar Crass Hat Tailings Contamination readed for rating; agency action, etc.)
Michaelan Hat Tailings contains approximately T million tons of mill tailings from local metal mines.
The tailings are located in an active stream valley.
Grown Surface water and air
contamination routes were scores.
Scores: S _M = 39.49(S _{GW} = 6.12 S _{SW} = 47.27 S _B = 48.46)
SFE =
S _{DC} = O

FIGURE 1 HRS COVER SHE

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The second secon	s	82
Groundwater Route Score (Sgw)	6.12	37.45
Surface Water Route Score (Ssw)	47.27	2234.45
Air Route Score (Sa)	48.46	2348.37
$s_{gw}^2 + s_{sw}^2 + s_a^2$		4620.27
$\sqrt{s_{gw}^2 + s_{sw}^2 + s_a^2}$		67.77
$\sqrt{s_{gw}^2 + s_{sw}^2 + s_a^2} / 1.73 - s_M -$		39.27

FIGURE 10 WORKSHEET FOR COMPUTING S_M

Chan State Div. Of

Environmental Health



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

1860 LINCOLN STREET DENVER, COLORADO 80295

August 5, 1985

REF: 8HWM-SR

L. Sue Russell Mitre Corporation 1820 Dolley Madison Boulevard McLean, Virginia 22102

Dear Sue:

Enclosed is some supplemental material for the HRS's for Richardson Flat's Tailings and Syro Steel. For Richardson's, the information is for an air release. Included are two photographs of a surface sample being taken while wind was blowing the tailings, along with the laboratory results for the sample and the background sample. While the background sample showed arsenic, lead and cadmium at 58, 1110 and 17 (ppm), respectively, the surface tailings sample contained 600, 8530 and 58. It is my understanding that this kind of documentation can be used in place of actual air samples for the air route. If you will accept this material, I'll revise the air route score sheets.

The additional documentation for Syro includes population data and surface water maps. This material does not affect the score, and is provided only for extra support of the material already submitted.

If you have any questions or comments about this information, please call me at (303) 293-1534.

Eric W. Johnson

Regional Site Project Officer

Note No enclosmes. Up

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JUI 1 9 1985

	00: 1: : wi
acility name: Richardson Flat Tailings	Utah Sizes Div
ocation: NUL See 1 T25 R4E	Environmental H
PA Region: VIII	
	ne
Person(s) in charge of the facility: United Paule City	
309 Korns Bldg	
Sect Sale City	_
lame of Reviewer: Susan Kennely	Date: 7/11/85
Seneral description of the facility: For example: landfill, surface impoundment, pile, container; types of	
acility; contamination route of major concern; types of information in	
Kichardson Flat untain approxim	σ .
of mill trilings from local me	
tulings are located in an a	ctive streem valley
Contamuition route, scored are	
and grown hunter fir was not	
Scores: $S_M = (S_{gw} = 32.93 S_{sw} = 43.6 S_a =)$	
S _{FE} =	ř
S _{DC} =	

FIGURE 1 HRS COVER SHEET

	s	\$ ²
Groundwater Route Score (Sgw)	32.93	1084.39
Surface Water Route Score (S _{SW})	43.64	1904.45
Air Route Score (Sa)	0	
$s_{gw}^2 + s_{sw}^2 + s_{a}^2$		2988.84
$\sqrt{s_{gw}^2 + s_{sw}^2 + s_a^2}$		54.67
$\sqrt{s_{gw}^2 + s_{sw}^2 + s_a^2} / 1.73 = s_M =$		31.60

FIGURE 10 WORKSHEET FOR COMPUTING S_M



309 KEARNS BUILDING
SALT LAKE CITY, UTAH 84101

December 18, 1984

DEC 20 1984

Utar, State DIV. Of Environmental Health

State of Utah
Department of Health
Marv Maxell
Utah CERCLA Coordinator
P. O. Box 2500
Salt Lake City, Utah 84110-2500

Dear Mr. Maxell:

In regard to your letter of October 9, 1984, regarding the evaluation of the Richardson Flat Tailings area, Summit County, Utah, I herewith request that you provide us with the criteria used in this assessment of the area and the results of your investigation which per your letter have been forwarded to the EPA Region VIII for evaluation.

Your cooperation in providing us with the above requested information will be appreciated.

Yours truly

E. L. Osika, Jr. Vice President and Secretary-Treasurer

ELO: jl

cc: Larry Edelman

Facility name: Richardson's FlAT TAilings
Location: NWYY SECT T25 R4E
EPA Region: VIII
Person(s) in charge of the facility: United Park City Mines Co
309 KERNS BLDG
SLC 1)TAA 84101
Name of Reviewer: Dow Uarbich Date: 09/04/84 General description of the facility:
(For example; landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)
Richardson's Flat contains approx 7 million
Tons of Mill Tailings deposited by
Various local Mines. The Tailings are
located in AN ACTIVE STREAM NATION THE
Comtamination routes scored me surface
And ground water as Air LAS NOT scored
Scores: SM =36.19 (Squ = 44.90S = 43.84 Sa = 0)
S _{FE} = ©
$s_{DC} = 2.50$

FIGURE 1 HRS COVER SHEET

APPENDIX D UTAH DEPARTMENT OF BUSINESS REGULATION FILES

APPENDIX D

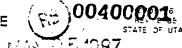
UTAH DEPARTMENT OF BUSINESS REGULATION FILES

400001	United Park City Mines Company 1986 Corporation Annual Report
400002-3	United Park City Mines Company Statement of Foreign Corporation
400004-28	United Park City Mines Company Restated Certificate of Incorporation May 26, 1981
400029	Statement of Information of United Park City Mines Company
400030-32	Certificate of Agreement of Consolidation between Park Utah Consolidated Mines Company and Silver King Coalition Mines Company
400033-35	Certificate of Agreement of Merger and Consolidation between Ontario Silver Mining Company and Park Utah Consolidated Mines Company
400036-37	Certification of the Articles of Incorporation of the Silver King Coalition Mines Company
400038	Document by Park Utah Mining Company accepting provisions of the Constitution of the State of Utah
400039-41	Certificate of Daly Mining Company's filing of Agreement of Incorporation
400042-44	Expired Certificate (Regarding transacting of business under an assumed name) of Park City Ventures
400045-50	Atlantic Richfield Company, Corporation Information
400051-53	The Anaconda Company 1986 Corporation Annual Report
400054-60	The Anaconda Company, Corporation Information
400061-63	The Anaconda Company Application for Certificate of Authority
400064	Certificate of the Anaconda Company's incorporation in North Dakota

400065-66	American Smelting and Refining Company 1986 Corporation Annual Report
400067	ASARCO Incorporated, Corporation Information
400068-70	ASARCO Incorporated Application for Certificate of Authority
400071-76	ASARCO Incorporated Certificate of Incorporation
400077-79	ASARCO Incorporated Application for Amended Certificate of Authority
400080-81	Noranda Exploration, Inc. 1985 Corporation Annual Report
400082	Noranda Exploration, Inc., Corporation Information
400083	Noranda Exploration, Inc., Application for Certificate of Authority
400084-85	Noranda Exploration, Inc. Certificate of Correction to Certificate of Incorporation
400086-95	Noranda Exploration, Inc. Certificate of Incorporation
400096-97	Noranda Mining Inc. 1985 Corporation Annual Report
400098	Noranda Mining Inc., Corporation Information
400099	Noranda Mining Inc. Application for Certificate of Authority
400100	Noranda Exploration, Inc. Consent to Use of Name
400101	Noranda Mining Inc. Certificate of Incorporation
400102	Pamour Porcupine Mines Inc. 1982 Corporation Annual Report
400103	Pamour Porcupine Mines Inc. Application for Certificate of Authority
400104-106	Pamour Porcupine Mines Inc. Application for Certificate of Withdrawal
400107-110	Pamour Porcupines Mines Inc. Certificate of Incorporation
400111	Greater Park City Company 1985 Corporation Annual Report
400112	Greater Park City Company, Corporation Information
400113-125	Treasure Mountain Resort Company Articles of Incorporation

400126-128	Treasure Mountain Resort Company Articles of Amendment to the Articles of Incorporation
400129	Greater Park City Company Certificate (Regarding transacting of business under an assumed name)
400130	Union Pacific Corporation, Corporation Information
400131-132	Union Pacific Railroad Company 1985 Corporation Annual Report
400133	Union Pacific Railroad Company, Corporation Information
400134-139	Pacific Subsidiary, Inc. Articles of Merger into Union Pacific Railroad Company
400140-141	Union Pacific Railroad Company Certification to do business in the State of Utah

DEPARTMENT OF BUSINESS REGULATION DIVISION OF CORPORATIONS AND COMMERCIAL CODE



CORPORATION ANNUAL REPORT In compliance with Section 16-10-121 & 122, and Section 16-10-12 of 16-10-110, U.C.A., 1953, the following report and if applicable the statement of change of registered office and/or agent, is submitted: (PLEASE TYPE OR PRINT CLEARLY) C28666 INC: 05/13/1953 F EXACT CORPORATE NAME UNITED PARK CITY MINES COMPANY E. L. OSIKA, JR. /VPST REGISTERED AGENT 309 KEARNS BUILDING REGISTERED OFFICE SALT LAKE CITY, UTAH 84101 RECEIVED IF NEW REGISTERED AGENT AND/OR OFFICE, PLEASE COMPLETE MAY 4 1987 New Registered Agent (Registered agent's signature) New Registered Office City State UTAH Zip (Street Aggress) (With the above change, the address of the registered office and the address of the business office of the registered agent are identical.) INCORPORATED UNDER THE LAWS OF __Delaware 3 _(STATE OR COUNTR' 4 IF INCORPORATED OUTSIDE THE STATE OF UTAH, GIVE THE ADDRESS OF THE PRINCIPAL OFFICE IN THE STATE OR COUNTRY OF INCORPORATION. State or Zip 19801 1209 Orange Street City Wilmington Delaware Country (Street Address) TYPE OF BUSINESS CONDUCTED IN UTAH Mining NAMES AND RESPECTIVE ADDRESSES OF THE OFFICERS AND DIRECTORS OF THE CORPORATION. STREET CITY, STATE, ZIP 163 S. Main St. 5.L.C., ct.84111 David W. Bernolfo President S.L.C., Ut. 84101 309 Kearns Bldg. E.L. Osika, Jr. Vice-President S.L.C., Ut. 84101 309 Kearns Bldg. E.L. Osika, Jr. Secretary S.L.C., Ut. 84101 Treasurer E.L. Osika, Jr. 309 Kearns Bldg. DIRECTORS: (UTAH LAW REQUIRES AT LEAST 3 DIRECTORS.) S.L.C., Ut. 84101 CITY, STATE ZIP Kearns Bldg. E. L. Osika Jr. 4. STREET ADDRESS

7

David W. Bernolfo 163 S. Main St. 1 521 Fifth Ave. Joseph S. Lesser 2 Hugh J. Leach 633 Falls Road 8

S.L.C., Ut 84111 N.Y, N.Y. 10175 Chagrin Falls, OH

AUTHORIZED SHARES (DO NOT CHANGE THE INFORMATION LISTED.) Number of Shares Series. If Any Itemized

Par Value Number of Shares

By Class 20,000,000 COMMON

Within A Class

Of Shares 1.0000 .0000

Without Par Value

NUMBER OF SHARES ISSUED (MUST BE COMPLETED)

Number of Shares Issued

Authorized

Itemized By Class Series, If Any Within A Class

Par Value Of Shares

Number of Shares Without Par Value

5,400,731 Capital .01

, 19

STATED CAPITAL AS OF DATE OF THIS REPORT (Number of Shares Issued X Par Value)\$ 54,007.31 Under the penalties of perjury and as an authorized officer, I declare that this annual report and, if applicable, the statement of change of registered office and/or agent, has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete

Authorized Officer

(If Registered Agent and/or Registered Office has been changed on this form, said TE DATE change must be authorized by a resolution adopted by the Board of Directors, and Send Report & Remittance to:

Vice President & Secretary-Treasurer Title or Position

> April 30,

Annual Report Division

160 EAST 300 SOUTH 2ND FLOOR

Make check payable to Annual Report Section

The President or Vice President must sign the report.)

URSUANT TO SECTION 16-10-121 AND 122. U.C.A., DRPORATIONS MUST FILE THEIR ANNUAL REPORTS WITHIN THE ONTH OF THEIR ANNIVERSARY DATE. FAILURE TO DO SO WILL SULT IN SUSPENSION OF THE CORPORATIONS CHARTER.

P.O.Box 45801 Salt Lake City, Utah 84145-0801

(801)530-6012

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DO NOT CHÂNGE OR ALTER THIS FORM

Statement of Foreign Corporation

Required by Title 18, Utah Code Annotated, 1943

We, the president (or vice-president) and secretary (or treasurer) of

UNITED PARK CITY MINES COMPANY

Delaware a corporation organized and existing under the laws of the State of desiring to qualify itself as a foreign corporation in the State of Utah and to transact business in the State of Utah do hereby certify and declare:

1. That the principal office and place of business in the State of Utah will be at

818 Kearns Building, Salt Lake City, Utah

- 2. That the general nature of the business of said corporation to be transacted in the State of Utah is mining in the broadest meaning of that term as more particularly set forth in the Certificate of Incorporation herewith filed of record.
 - 3. That the names and addresses of the principal officers of said corporation are as follows:

Address

JOHN M. WALLACE FRANK A. VARDLAW, JR. D. J. POPE

J. WM. STOMER

President 2520 Walker Lane, Salt Lake City, Utah 1283 East South Temple, Salt Lake City Vice-President 1949 Laird Brive, Salt Lake City, Utak

Secretary

1733 Berbert Ave., Salt Lake City, Utah

Treasurer

General Manager

The amount of the authorized capital stock of said corporation is Six Million (\$6,000,000)

Dollars.

Six Million shares (Par Value \$1.00)

__ Common \$ 6,000,000

Preferred \$ None

5. The amount of capital stock subscribed is *Three Million, Right Bundred Twenty-eight Thousand, Three Rundred Hinsty Hine and Sixty-five Ond Hundredths Dollars.

Common \$

3,828,399.65

Preferred \$

6. The amount of capital stock actually paid in, in cash or property is

\$3,828,399.65

3,828,399.65

Dollars.

7. The proportion and amount of the capital stock of said corporation represented by its property located in Utah or to be acquired therein and by its business to be transacted therein is

\$3,828,399.65

Dollara.

^{*} The amount of capital stock subscribed and the amount of capital stock actually paid in (Items 5 and 6 above) will ultimately be reduced by the number of fractional shares which cannot be issued by reason of the provisions of Article III of said Certificate of Incorporation of this Company, and also by the number of shares that are not converted by surrender of shares of the PARK UTAH CONSOLIDATED MINES COMPANY and SILVER KING COALITION MINES COMPANY, for shares of this Corporation by any dissenting or objecting stockholders of said Companies pursuant to and strictly in accordance with Section 262, General Corporation Law of Delaware and Section 41, Mevada Domestic Corporation Law, as amended.

8. The amount of its capital stock represented by its property located in Utah or to be acquired therein and by its business to be transacted therein is 3,828,399.65 Pd on 6, 250, on Park With 7-3-25 Dollars. STATE OF COUNTY OF SALT LAKE 12 On this day of A. D. 1953 personally appeared before me, a Notary Public in and for said County and State JOHN W. WALLACE who are respectively president (Statement) and secretary (Statement) of the above described corporation and made oath that the foregoing statement by them subscribed is true in substance and in fact. Residing at Salt Lake City, Utah My Commission expires

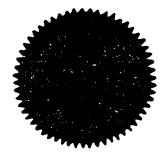
W hereas,	UNITED PARK	CITY MINES CON	PAUT	
was duly incorporated une	der the laws of	the State of De	lavare	on the
8th day of	Уву		D. 19 .53, and	
	•			
WHEREAS, the sai	d corporation is nov	w doing business, o	r is desirous of do	ing business within
the State of Utah;				:
NOW, THEREFOR	RE, BE IT RESOLV	VED, by the Boar	rd of Directors of	said corporation,
that the provisions of the	: Constitution of th	ne State of Utah a	are hereby accepte	d as binding upon
said corporation, and		-	, i.	
er e		: ;	₹ /·	
BE IT FURTHER I	RESOLVED, that	J. WML STOR	KR V	
residing in the City ofSe	elt Labe	, County of	Salt Labe	***********
in the State of Utah, that	being the County	in which the princi	ipal place of busine	ess of this corpora-
tion is now, or is about to	be situated, be and	he is hereby appo	inted the Attorney	or Agent of said
corporation upon whom p	process issued by au	thority of or under	r any law of the St	ate may be served.
We. JOHN M. WALL	LACE	President, and	L. VM. STORER	
Secretary of said Corpora	tion, do hereby cert	tify that the forego	oing is a full, true	and correct copy
of a resolution adopted by			-	
day of				
	In Witness Where	rof. we have subs	cribed our names	and affixed the
, (1)		corporate seal	of said corporation	n this 12th
		day of	Kay	, A. D. 19. 53
		(0)		Acaia
•		/	~~~~~	President
	•	(a)	The Star	
			1991, X 100 W	Secretary
				•



Office of SECRETARY OF STATE

I, Glenn C. Kenton Secretary of State of the State of Delaware, do hereby certify that the above and foregoing is a true and correct copy of Restated Certificate of Incorporation of the "UNITED PARK CITY MINES COMPANY", as received and filed in this office the fifth day of June, A.D. 1981, at 9 o'clock A.M.

In	Testimony	Whereof, I have	, hereunto set m	y hand
an	d official se	al at Dover this _	fifth	day
	of	June	_in the year of o	
	one thou	sand nine hundred	land	eighty-one



Glenn C. Kenton, Secretary of State

FORM 120

OF
UNITED PARK CITY MINES COMPANY

May 26, 1981

1596 6/10/81 25.00 TL

RESTATED CERTIFICATE OF INCORPORATION OF UNITED PARK CITY MINES COMPANY

The undersigned, being, respectively, the President and the Secretary of United Park City Mines Company, do hereby, certify:

- 1. The name of the Corporation is UNITED PARK CITY MINES COMPANY.
- 2. The Certificate of Incorporation of the Corporation was filed with the Secretary of State of Delaware on May 8, 1953.
- 3. The text of the Certificate of Incorporation is hereby restated to read as herein set forth in full:

ARTICLE I

NAME: The name of the corporation shall be United Park City Mines Company (herein called the "corporation").

ARTICLE II

REGISTERED OFFICE AND AGENT: The principal office of the corporation in the State of Delaware is located at No. 100 West 10th Street in the City of Wilmington, County of New Castle. The name and address of its resident agent is The Corporation Trust Company, No. 100 West 10th Street, Wilmington, Delaware.

ARTICLE III

PURPOSES: The nature of the business and the objects and purposes of the corporation proposed to be transacted, promoted or carried on by it are as follows:

(1) To purchase, take, acquire, buy, hold, own, sell, lease, mortgage, take and hold in trust, convey to trustees and otherwise deal in and dispose of all kinds of mines and mineral lands, mining claims, lodes, veins, and any and all mining and mineral rights, to mine, grant and acquire licenses or other rights for mining and to carry on any and all business, and to do any and all things incidental thereto; to mine, quarry and otherwise extract, take out and remove, and to crush, clean, reduce, mill, smelt, refine, treat, amalgamate, manipulate, dress and prepare for the market and sell ores, metals, minerals, earth, and materials of every kind and description, and (as principal, agent, commission merchant or consignee) to manufacture, sell and deal in

all articles and products in the manufacture or composition of which the same or any of them are factors, and all things necessary or convenient for use in connection therewith and to carry on any other operations which may seem conducive to any of the corporation's objects; to buy, sell, manufacture and deal in minerals, plants, machinery, implements, conveniences and things capable of being used in connection with mining operations or required by workmen or others employed by the corporation; to construct, carry out, maintain, improve, manage, work, control and superintend any roads, ways, bridges, reservoirs, water course, aqueducts, wharves, furnaces, mills, crushing works, hydraulic works, works, factories, warehouses and other works and conveniences, which may seem directly or indirectly conducive to any of the objects of the corporation, and to contribute to, subsidize or otherwise aid or take part in any such operations; to take, acquire by purchase or otherwise, buy, hold, own, sell, grant, convey, hire, lease, mortgage, take and hold in trust, convey to trustees and improve, cultivate and otherwise deal and trade in and dispose of, timber lands and any and all kinds of real property; to engage in the business of purchasing, cutting, removing, hauling, manufacturing, selling, transporting, trading and dealing in all kinds of lumber, logs, and timber and all kinds of articles manufactured therefrom and to do all things in any way appertaining thereto; to purchase, take, acquire, buy, hold for investment or otherwise, own, sell, hire, lease, mortgage, pledge, take and hold in trust, convey to trustees and otherwise deal in and dispose of all kinds of personal property, chattels and chattels real, choses in action, patents for invention, bullion, gold, silver and other ores.

- (2) To purchase, take, acquire, buy, hold, own, sell, hire, lease, mortgage, take and hold in trust, convey to trustees and otherwise deal in, operate and dispose of, oil lands, wells, and to grant and acquire any and all oil right or rights, to bore for oil; to acquire, construct, maintain, own and operate pipe lines and all works or facilities necessary or convenient for the storage, distribution, conveyance or use of oil and to carry on any and all business incidental thereto.
- (3) To take, acquire, appropriate, purchase, sell, hire, lease, mortgage, take and hold in trust, convey to trustees, store, supply and furnish water for irrigation, manufacturing mining and domestic uses and for any other purpose for which water can be applied as a use.
- (4) To acquire, construct, maintain, own and operate reservoirs, dams, canals, tunnels, ditches, flumes and pipelines and

all other works necessary or convenient for the catchment, diversion, storage, distribution, or use of water, and to purchase, take, acquire, buy, hold, own, sell, hire, lease, mortgage, take and hold in trust, convey to trustees, or otherwise deal in and dispose of the same and rights to water and riparian rights.

- (5) To construct and erect buildings, structures and facilities for the use of the corporation or for sale or lease to others for the conduct of any of the purposes of the corporation, including, but not limited to, the resort or recreation business and to build, acquire, purchase, mortgage, or lease buildings, towers, lodging facilities or any other structures or areas of land incidental to the operation of an area for winter sports or summer sports, including, but not limited to, skiing, skating, swimming, boating and golf; to conduct hotels, restaurants, taverns, sporting shops or any other facilities incidental to any of the operations of the corporation or to lease, mortgage or sell any of such facilities.
- (6) To carry on and conduct the business of a holding company and to carry on and conduct agricultural, horticultural, pomological and dairy businesses; to buy, sell, mortgage, construct, maintain and charter vessels propelled by means of sail, steam, electricity or other motive power and to operate and navigate the same in all the navigable waters of the earth and to ship and convey by sea, land or otherwise, any and all articles, goods, wares, ores and merchandise whatever, and generally to ship, convey and transport freight or passengers for hire or otherwise.
- (7) To acquire by lease or otherwise and to control and operate companies engaged in manufacturing, mining or in any other business; to own, acquire by purchase or otherwise, hold, buy, sell, grant, dispose of, hire, lease, take and hold in trust, mortgage, encumber, hypothecate, deposit as collateral security, convey to trustees, deal and trade in, build and construct, operate, run, manage and maintain all manner of mills, factories or machinery, and (outside of the State of Delaware) electric light plants, franchises, lines and property and all manner of plants and franchises for generating, supplying or distributing electricity, illuminating gas or for generating, supplying, or distributing any sort of light, heat and power, pipe lines, conduits and subways for any purpose, railways and railroads, telegraph and telephone lines, franchises for railways and railroads, telegraph and telephone lines, rights of way, road beds, superstructures, engines, cars, depots, stations, machinery and all the property and appurtenances of a railway or railroad, telegraph or telephone line and any franchises of any sort whatever, whether connected with or apart from existing property, and

all other property real and personal, rights, privileges and franchises and appurtenances, which may be used in running, conducting, operating and carrying on the business and affairs aforesaid and the various branches thereof.

- (8) Also to purchase, construct, sell, hire, lease, mort-gage, take and hold in trust, convey, dispose of, equip, improve, develop, maintain and control docks, harbors, wharves, chutes piers, embankments, viaducts, reservoirs, water works or sewerage, drainage and sanitary works, canals, ditches, buildings, pavements, structures of all kinds, and to do all acts and exercise all of the powers incidental thereto which a natural person could exercise.
- (9) To organize and to promote and to facilitate the organization and promotion of subsidiary corporations and to convey, transfer or assign all or any part of its assets to any subsidiary corporation or corporations in exchange for shares of the capital stock or other securities of such subsidiary corporation or corporations.
- (10) To do any and all of the things herein set forth, as the objects, purposes and powers or otherwise to the same extent and as fully as natural persons might or could do, and in any part of the world, as principals, agents, contractors, trustees or otherwise, either alone or in conjunction with any other, other persons, associations or corporations.
- (11) To conduct its business in all its branches and to have one or more offices and to unlimitedly hold, purchase and convey real and personal property, both within and without the State of Delaware, and in all other States, Territories and Colonies of the United States and in any foreign countries and places.
- (12) The corporation shall have express power, as fully as an individual might do, to incur debt, to issue bonds, obligations, debentures and evidences of indebtedness of all kinds, whether secured by mortgage or otherwise, without limit as to amount, as well as to secure the same by mortgage, pledge or otherwise.
- (13) To purchase, acquire, own, hold for investment or otherwise, sell, assign, transfer, mortgage, pledge, exchange or otherwise dispose of, shares of the capital stock, bonds, and any securities, certificates or other evidences of indebtedness or obligations of any other corporation or corporations created under the laws of this or any other State or country, and to exercise

while the owner thereof all the rights, powers and privileges appertaining thereto, including the right to vote on stock, which natural persons being the owners of such stock might, could or would exercise, and in any manner by the ownership of stock or otherwise to control and manage any such corporation.

- (14) To guarantee the payment of dividends or interest on any shares, stocks, debentures, certificates or other evidences of indebtedness or other securities issued by, or any other contract or obligation of any corporation, whenever proper or necessary for the business of this corporation in the opinion of its directors.
- (15) To aid by the loaning of money or in any other manner whatsoever any association, copartnership or individual or any corporation, either public or private, or any body politic in whose business this corporation may be in any way interested in any of whose properties, including shares of stock, bonds or other obligations or securities, shall be held or in any way guaranteed by this corporation, or in which it is in any way interested, and to do any acts or things which are or may appear necessary, useful, convenient or appropriate for the preservation, protection, improvement or enhancement of the value of any such business or property or for the promotion of any such interest of this corporation.
- (16) To apply for, obtain, register, purchase, lease or otherwise acquire or obtain the use of and to hold, own, use, work, operate, develop and introduce and to sell, assign, grant licenses in respect of or otherwise deal with, dispose of, or turn to account any copyrights, trademarks, tradenames, brands, labels, patent rights, letters patent of the United States of America, or of any other country, government or authority, and any inventions, improvements, processes and formulae, whether in connection with or secured under letters patent or otherwise.
- (17) The corporation may purchase or acquire its own capital stock from time to time to such extent and in such manner and upon such terms as its Board of Directors shall determine.
- (18) To loan and advance money and as security for the same to take and hold mortgages, deeds of trust, deposits, pledges and other securities upon any real or personal property whatsoever.
- (19) To acquire the whole or any part of the business property, assets and liabilities of any persons, firms, associations or corporations necessary or incidental to carrying out the purposes of this corporation, and in any way not inconsistent with

the laws of the State of Delaware and the acts under which this corporation is incorporated.

- (20) To do all and everything necessary and proper for the accomplishment of any of the purposes, and the attainment of any one or more of the objects herein enumerated, or any of the powers herein named, or which shall at any time be necessary or incidental to the protection or benefit of the corporation, either as holder of or interested in any property or otherwise, and in general to carry on any lawful business, necessary or incidental to carrying out the purposes of the corporation, and whether similar in nature to the objects and powers heretofore herein enumerated or otherwise, but nothing herein contained is to be construed to authorize the formation of a corporation with power of carrying on the business of discounting bills, notes or other evidences of debt, or of receiving deposits of money, or buying gold and silver bullion, or foreign coins, or buying and selling bills of exchange or of issuing bills, notes or other evidences of debt for circulation as money; nothing in all of the purposes heretofore stated in this certificate, however, shall be construed to give the corporation any rights, powers or privileges not permitted by the laws of the State of Delaware, to corporations organized under the statutes of the State of Delaware.
- (21) The foregoing clauses shall each be construed as purposes, objects and powers, and the matters expressed in each clause shall, except as otherwise expressly provided, be in nowise limited by reference to, or inference from, terms of any other clause, but shall be regarded as independent purposes, objects and powers and the enumeration of specific purposes, objects and powers shall not be construed to limit or restrict in any manner the meaning of general terms or the general powers now or hereafter conferred by the laws of the State of Delaware, nor shall the expression of one thing be deemed to exclude another, although it be of like nature, not expressed.

ARTICLE IV

CAPITALIZATION: The total number of shares of capital stock which the corporation shall have authority to issue is twenty million (20,000,000) of the par value of \$1 per share, amounting in the aggregate of Twenty Million Dollars (\$20,000,000).

ARTICLE V

ISSUANCE OF SHARES; PREEMPTIVE RIGHTS, ETC. All or any of the shares of capital stock of the corporation may be issued from time to time by the corporation, acting through the Board of

Directors, without action by the stockholders, in such amounts and for such consideration (not less than par for shares having a par value) as the Board of Directors in their absolute discretion may deem advisable. No holder of stock shall be entitled as of right to subscribe for, purchase or receive any part of any authorized but unissued stock or of any additional stock issued by the corporation, or of any bonds, certificates of indebtedness, debentures or other securities convertible into stock of the corporation, but any such authorized but unissued stock, or any such additional issued stock, or any such other securities convertible into stock may be issued by the corporation, acting through the Board of Directors, without action by the stockholders, to such person or persons and on such terms and for such consideration (not less than par for shares having a par value) as the Board of Directors in their absolute discretion may deem advisable.

ARTICLE VI

EXISTENCE: The corporation is to have perpetual existence.

ARTICLE VII

STOCKHOLDERS NOT LIABLE FOR CORPORATE DEBTS: The private property of the stockholders of the corporation shall not be subject to the payment of corporate debts to any extent whatsoever.

ARTICLE VIII

DIRECTORS: The number of Directors of the corporation which shall constitute the whole Board shall be such as from time to time shall be fixed in the manner provided in the By-Laws of the corporation but in no case shall the number be less than three (3). Vacancies in the office of any director caused by death, resignation, removal or otherwise and newly created directorships resulting from an increase in the number of directors may be filled by a majority of the directors then in office, though less than a quorum, and directors so chosen shall hold office until the next annual election and until their successors shall be duly elected and qualified. The By-Laws may prescribe the number of directors necessary to constitute a quorum of the Board of Directors.

ARTICLE IX

MEETINGS OF STOCKHOLDERS AND DIRECTORS: The stockholders and Board of Directors shall have power to hold their meetings and keep the books, documents and papers of the corporation outside of

the State of Delaware, at such places as from time to time may be designated by the By-Laws except as otherwise required by the laws of the State of Delaware.

ARTICLE X

ACCOUNTS AND BOOKS: The Board of Directors may from time to time determine, subject to the laws of the State of Delaware, whether and to what extent and at what time and places, and under what conditions and regulations, the accounts and books of the corporation or any of them shall be open to the inspection of the stockholders, and no stockholder shall have any right to inspect any account, or book or document of the corporation, except as conferred by statute or authorized by the Board of Directors or by resolution of the stockholders.

ARTICLE XI

BY-LAWS: The Board of Directors may make By-Laws, and from time to time, may alter, amend or repeal any of them but any By-Law made by the Board of Directors may be altered, amended or repealed by the stockholders at any annual meeting or at any special meeting, provided notice of such proposed alteration or repeal shall be included in the notice of such meeting.

ARTICLE XII

EXECUTIVE AND OTHER COMMITTEES: The Board of Directors, by the affirmative vote of the majority of the whole Board, may appoint from the Directors, an executive committee of which a majority shall constitute a quorum; and to such extent as shall be provided in the By-Laws, such committee shall have and may exercise all or any of the powers of the Board of Directors, including power to cause the seal of the corporation to be affixed to all papers that may require it. The Board of Directors by the affirmative vote of the majority of the whole Board may appoint any other standing committees, and such standing committees shall have and may exercise such powers as shall be authorized by the By-Laws.

ARTICLE XIII

WORKING CAPITAL; DIVIDENDS, ETC.: The Board of Directors shall have the power from time to time to fix and determine and to vary the amount to be set aside as the working capital of the corporation; to determine whether any, and if any, what part of any, accumulated profits or surplus shall be declared as dividends and paid to the stockholders and in connection therewith, if the

corporation is engaged in the exploitation of wasting assets, may determine the net profits derived from the exploitation of such wasting assets without taking into consideration the depletion of such assets resulting from lapse of time or from necessary consumption of such assets incidental to their exploitation, to determine the date or dates for the declaration and payment of dividends, and to direct and to determine the use and disposition of any surplus or any net profits over and above the capital stock paid in, except as herein otherwise provided; and in its discretion, the Board of Directors may purchase or acquire the corporation's own bonds or other obligations or shares of its capital stock, and may resell the same from time to time to such extent and in such manner and upon such terms as the Board of Directors shall deem expedient.

ARTICLE XIV

TRANSACTIONS WITH DIRECTORS: The corporation may enter into contracts or transact business with one or more of its directors, or with any firm of which one or more of its directors are members, or with any corporation or association in which any of its directors is a stockholder, director or officer, and such contract or transaction shall not be invalidated or in anywise affected by the fact that such director or directors have or may have interests therein which are or might be adverse to the interests of the corporation, even though the vote of the director or directors having such adverse interests shall have been necessary to obligate the corporation upon such contract or transaction; and no director or directors having such adverse interests shall be liable to the corporation or to any stockholder or creditor thereof, or to any other person by reason of any such contract or transaction; nor shall any such director or directors be accountable for any gains or profits realized thereon; always provided, however, that such contract or transaction shall, at the time it was entered into, have been a reasonable one to have been entered into and shall have been upon terms that at the time were fair.

ARTICLE XV

INDEMNIFICATION: Each director and each officer of the corporation shall be indemnified by the corporation against all expenses, as hereinafter defined, which shall necessarily or reasonably be incurred by him in connection with any action, suit or proceeding to which he is or shall be a party, or with which he may be threatened, by reason of his being or having been a director or officer of the corporation, whether or not he continues to be a director or officer at the time of incurring such expenses. As used in this paragraph, expenses shall include amount of

judgments against, or amounts paid in settlement by, such director or officer, other than amounts payable or paid to the corporation, but shall not include any (a) expenses incurred in connection with any matters as to which such director or officer shall be adjudged in such action, suit or proceeding, without such judgment being reversed, to be liable by reason of his negligence or wilful misconduct in the performance of his duties as such director or officer, or (b) expenses incurred in connection with any matters which shall have been the subject of such action, suit, or proceeding disposed of otherwise than by adjudication on the merits, unless in relation to such matters such director or officer shall not have been liable for negligence or wilful misconduct in the performance of his duties as a director or officer. As to whether or not a director or officer was liable for negligence or wilful misconduct in the performance of his duties as such director or officer, the Board of Directors and each director and officer may conclusively rely upon an opinion of legal counsel selected by or in the manner designated by the Board of Directors. The foregoing right of indemnification shall be in addition to any rights to which any director or officer may be or become entitled by law, vote of stockholders or otherwise.

ARTICLE XVI

AMENDMENT: The corporation reserves the right to amend, alter, change or repeal any provision contained in this certificate in the manner now or hereafter prescribed by statute; and all rights herein conferred upon the stockholders except as otherwise herein expressly provided are granted subject to this reservation.

4. This Restated Certificate of Incorporation was adopted by the Board of Directors and the shareholders of the Corporation in accordance with Sections 242 and 245 of the General Corporation Law of the State of Delaware. Said Certificate: (a) amends Articles Fourth of the Corporation's Certificate of Incorporation to increase the number of shares of capital stock which the Corporation is authorized to issue from six million (6,000,000) shares of \$1.00 par value capital stock to twenty million (20,000,000) shares of \$1.00 par value capital stock; and (b) provides descriptive captions for each Article. Said Certificate does not otherwise amend the provisions of the Corporation's Certificate of Incorporation.

IN WITNESS WHEREOF, the undersigned have signed this Certificate as of this 26th day of May, 1981.

E. L. Osika, Secretary

Wheeler M. Sears, President

BY-LAWS

OF

UNITED PARK CITY MINES COMPANY

Adopted April 27, 1953

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BY-LAWS OF UNITED PARK CITY MINES COMPANY

ARTICLE I

STOCKHOLDERS

SECTION 1. Place of Meeting.

All meetings of the stockholders shall be held at the office of the corporation in the City of Salt Lake, County of Salt Lake, State of Utah, except such meetings as the Board of Directors expressly determine shall be held elsewhere, in which case meetings may be held upon notice as hereinafter provided, at such other place or places within or without the State of Utah as said Board of Directors may determine.

SECTION 2. Annual Meeting.

The annual meeting of stockholders shall be held the fourth Tuesday in May in each year after the year 1953, unless said day be a legal holiday, in which case the annual meeting shall be held on the next day thereafter not a legal holiday, for the purpose of electing directors and for the transaction of such other business as may be brought before the meeting.

SECTION 3. Special Meeting.

A special meeting of the stockholders may be called at any time by the Board of Directors, or the President, and shall be called by the Board of Directors upon the written request of the holder or holders of record of shares amounting to one-fourth (1/4) or more of the capital stock of the corporation then issued and outstanding and entitled to vote at such meeting. In calling any special meeting the Board of Directors or President shall specify in the call the purpose of the meeting; and no new matter not so specified shall be introduced or considered at such meeting = or any adjournment thereof.

SECTION 4. Notice of Meeting.

Written notice of the day, place and hour of each annual meeting, and the day, place, hour and purpose of each special meeting, shall be given to the holders of record of the shares of stock of the corporation entitled to vote by mailing postage prepaid or delivering such notice in person to each such holder at his address appearing on the stock books of the corporation at

least ten days prior to such meeting. Failure to give notice of any annual meeting, or any irregularity in such notice, shall not affect the validity of any annual meeting or of any proceedings at such meeting.

SECTION 5. Quorum.

At all meetings of the stockholders there shall be present either in person or by proxy stockholders owning a majority of the shares outstanding and entitled to vote in order to constitute a quorum. Except as otherwise provided by statute or by the Certificate of Incorporation or the By-Laws of the corporation, the vote of a majority of any quorum shall be sufficient to elect directors and to pass any resolution, within the power of the holders of all the outstanding shares.

If at any annual or special meeting of the stockholders a quorum of stockholders shall not be present, a majority of those present, without notice other than announcement at the meeting, may adjourn the meeting from time to time until a quorum shall attend, whereupon any business may be transacted at the meeting as though held when originally convened. The Secretary of the corporation, or in his absence an Assistant Secretary or an appointee of the presiding officer of the meeting, shall act as the Secretary of the meeting.

SECTION 6. Voting.

At each meeting of the stockholders every stockholder of the corporation shall be entitled to one vote in person or by proxy for each share of stock having voting power, in respect of the matter on which the vote is to be taken, standing in his name on the books of the corporation, at the time of the closing of the transfer books for the meeting, or, if the books be not closed for any meeting, on the record date fixed as provided in Section 5 of Article IV of these By-Laws for determining the stockholders entitled to vote at such meeting, or if the books be not closed and no record date be fixed, at the time of the meeting; but except where the transfer books of the corporation shall have been closed or a date shall have been fixed as a record date for the determination of stockholders entitled to vote as provided in Section 5 of Article IV hereof, no share of stock shall be voted on at any election of directors which shall have been transferred on the books of the corporation within twenty (20) days next preceding such election.

At least ten (10) days before every election, a complete list of stockholders entitled to vote, arranged in alphabetical

order, shall be lodged and open to the examination of any stock-holder, for said period of ten (10) days, at the place where said election is to be held, and shall be produced and kept at the time and place of election during the whole time thereof and subject to the inspection of any stockholders who may be present.

Election of directors may not be by ballot, provided, however, that by resolution duly adopted, a vote by ballot may be required.

SECTION 7. Proxies.

Any stockholder entitled to vote upon any matter at any meeting of stockholders may so vote by proxy; but no proxy shall be voted on after three (3) years from its date, unless said proxy provides for a longer period for which it shall remain in force. Every proxy shall be in writing, subscribed by the stockholder or his duly authorized attorney, but need not be sealed, witnessed or acknowledged. Proxies shall be delivered to the Secretary of the corporation before such meetings.

ARTICLE II

BOARD OF DIRECTORS

SECTION 1. Number; Method of Election; Terms of Office and Qualification.

The business, property and affairs of the corporation shall be managed and controlled by a Board of Directors and the number of directors which shall constitute the whole Board shall be not less than three (3) nor more than fifteen (15), the number thereof to be determined within such limits by resolution adopted by a majority of the directors then in office at any regular or special meeting of the Board provided that notice of such regular or special meeting shall have stated that a proposal to change the number of directors is one of the purposes of such meeting, except that such notice may be waived by any director.

The directors shall be elected at the annual meeting of stockholders, each to hold office for the term of one (1) year and until his successor shall have been duly chosen and shall have qualified, except that the directors first selected shall hold office until the first annual meeting of stockholders. Any director may resign his office at any time by delivering his resignation in writing to the corporation, and the acceptance of such resignation unless required by the terms thereof shall not be necessary to make such resignation effective. Vacancies in the

office of any director caused by death, resignation, removal or otherwise and newly created directorships resulting from an increase in the number of directors may be filled by a majority of the remaining directors though less than a quorum.

If, for any reason, the annual meeting of stockholders for the election of directors shall not be held at the time appointed by these By-Laws, the directors shall cause the election to be held as soon thereafter as conveniently may be, and the directors then in office shall continue until such election shall have been held and their successors duly chosen and qualified.

SECTION 2. Meetings.

The Board of Directors may hold its meetings and have an office and keep the books of the corporaton, except as otherwise provided by the statutes of Delaware, in such place or places within or without the State of Delaware, as the Board by resolution from time to time may determine.

The Board of Directors may in its discretion provide for regular or stated meetings of the Board. Notice of regular or stated meetings need not be given. Special meetings of the Board shall be held whenever called by direction of the President or any two of the directors for the time being in office. The Secretary shall give notice of such special meeting by mailing same at least three (3) days, or by telegraphing the same at least one (1) day, before the meeting to each director; but such notice may be waived by any director. Unless otherwise indicated in the notice thereof, any and all business may be transacted at a special meeting.

At any meeting at which every director shall be present, even though without notice, any business may be transacted. No notice of any adjourned meeting need be given.

The Board of Directors shall meet as soon as practicable after election, following the annual meeting of stockholders, for the election of a President and other corporate officers as hereinafter specified, and for the transaction of any other business which may come before it. No notice of such meeting shall be necessary.

SECTION 3. Quorum.

A majority of the total number of directors shall constitute a quorum for the transaction of business; but if there shall be less than a quorum at any meeting of the Board a majority of these present may adjourn the meeting from time to time, without notice to the absent directors.

SECTION 4. Executive Committee.

The Board of Directors may appoint an Executive Committee consisting of the President and two or more other members of the Board, who shall be chosen by the vote of a majority of the whole Board at the first meeting after the annual election or as soon thereafter as possible. During the interval between the meetings of the Board of Directors, the Executive Committee shall possess and may exercise all of the powers of the Board of Directors, so far as such may be legally delegated, to manage and direct all the business and affairs of the corporation in such manner as the Committee shall deem best for its interests, except as limited from time to time by resolution of the Board of Directors. Any vacancy in the Executive Committee shall be filled by the Board of Directors.

The Committee shall adopt its own rules of procedure and may provide for regular or stated meetings. Special meetings may be called at any time by the President and shall be called at the request of any two (2) members of the Committee. No notice of regular or stated meetings need be given. Notice of any special meeting shall be given by mail or telegraph or telephone or delivered in person to each member of the Committee not less than twenty-four (24) hours before the meeting. When a meeting of the Board of Directors has been called, a meeting of the Executive Committee may be held, when the Board is not in session, at the same time and place without further notice. The Executive Committee shall keep a record of its proceedings and report the same to the Board of Directors. A majority of the members of the Committee shall constitute a quorum for the transaction of business.

SECTION 5. Compensation of Directors.

Each member of the Board of Directors shall be paid a sum, fixed or determined as provided by the Board, for attendance at each special or regular meeting of the Board of Directors or Executive Committee; provided, that nothing herein contained shall be construed to preclude any director from serving in any other capacity and receiving compensation therefor.

ARTICLE III

OFFICERS

SECTION 1. General Provisions.

The corporate officers of the corporation shall consist of a President (who shall be chosen from the Board of Directors), one

or more Vice Presidents, a Secretary, one or more Assistant Secretaries, a Treasurer, one or more Assistant Treasurers, and such other officers as the Board of Directors or the Executive Committee may from time to time appoint. One person may hold any two offices, except the office of President, the holder of which shall occupy no other office in the corporation. The foregoing officers shall be elected by the Board of Directors at the first meeting after the first meeting of incorporators and thereafter after the stockholders' annual meeting in each year. They shall hold office, respectively, for the term of one year and until their respective successors shall have been chosen and shall have qualified, unless removed as hereinafter provided.

Any officer elected or appointed by the Board of Directors or the Executive Committee, may be removed at any time by the affirmative vote of a majority of the whole Board of Directors.

SECTION 2. President's Powers and Duties.

The President shall be the Chief Executive Officer of the corporation. He shall have general and active management of the business of the corporation; see that all orders and resolutions of the Board of Directors and Executive Committee are carried into effect; have authority to execute all contracts and agreements authorized by the Board or Executive Committee; when authorized by the Board or the Executive Committee, to sign and to affix the seal of the corporation to any instrument requiring the same, which seal shall be attested by the signature of the Secretary or Treasurer. He shall have the general supervision and direction of the other officers of the corporation, and see that their duties are properly performed.

He shall have general powers of supervision and management usually vested in the office of President of a corporation.

SECTION 3. Powers and Duties of Vice Presidents.

The Vice Presidents shall perform such duties as may from time to time be assigned to them by the Board of Directors, the Executive Committee, or the President.

SECTION 4. Powers and Duties of Secretary.

The Secretary or an Assistant Secretary shall record the proceedings of all meetings of the Board of Directors, of the stockholders and of the Executive Committee in books kept for that purpose. The Secretary shall be the custodian of the corporate seal and he or an Assistant Secretary shall affix the same to and countersign papers requiring such acts, but only on the order of

the Board of Directors, the Executive Committee, the President or a Vice President; and shall perform such other duties as may be required by the Board of Directors, the Executive Committee or the President.

SECTION 5. Powers and Duties of Treasurer.

The Treasurer and Assistant Treasurers shall have care and custody of all funds of the corporation and disburse and administer the same under the direction of the Board of Directors, the Executive Committee, the President, or designated Vice President; and shall perform such other duties as the Board, the Executive Committee, the President or the designated Vice President shall assign to them.

SECTION 6. Salaries and Appointments.

The salaries of corporate officers shall be fixed by the Board of Directors or the Executive Committee.

ARTICLE IV

CAPITAL STOCK

SECTION 1. Certificates of Stock.

Certificates of stock specifying the number of shares owned shall be issued to each stockholder in such form not inconsistent with the Certificate of Incorporation as shall be approved by the Board of Directors. Such certificates of stock shall be numbered and registered in the order in which they are issued, shall bear the seal of the corporation which may be facsimile and shall be signed by the President or a Vice President and by the Secretary or an Assistant Secretary, provided, however, that where such certificates are signed by a transfer agent and a registrar, the signatures of the President and Secretary may be facsimile. In case any officer or officers who shall have signed, or whose facsimile signature or signatures shall have been used on any such certificate or certificates, shall cease to be such officer or officers of such corporation, whether because of death, resignation or otherwise, before such certificate or certificate or certificates may nevertheless be adopted by such corporation and be issued and delivered as though the person or persons who signed such certificate or certificates or whose facsimile signature or signatures shall have been used thereon had not ceased to be such officer or officers of such corporation.

SECTION 5. Closing of Transfer Books - Record Date.

The Board of Directors may fix the time, not exceeding fifty (50) days preceding the date of any meeting of stockholders or any dividend payment date or any date for the allotment of rights, or the date when any change or conversion or exchange of capital stock shall go into effect, during which the books of the corporation shall be closed against transfers of stock. of providing for the closing of the books against transfers of stock as aforesaid, the Board of Directors from time to time, and at any time, may fix in advance a date, not exceeding fifty (50) days preceding the date of any meeting of stockholders or the date for the payment of any dividend or the date for any allotment of rights, or the date when any change or conversion or exchange of capital stock shall go into effect, as a record date for the determination of the stockholders entitled to notice of and to vote at such meeting or entitled to receive such dividends or allotment of rights, or to exercise the rights in respect of any such change, conversion or exchange of capital stock, as the case may be; and only stockholders of record on such date shall be entitled to notice of or to vote at such meeting or to receive such dividends or allotment of rights, or to exercise such rights in respect of any such change, conversion or exchange of capital stock, as the case may be.

ARTICLE V

DIVIDENDS AND RESERVES

Dividends upon the capital stock of the corporation may be declared from annual net profits or from net assets in excess of capital, subject to all provisions in the Certificate of Incorporation contained, by the Board of Directors at any regular or special meeting. To the extent that the corporation is engaged in the exploitation of wasting assets, the Board of Directors may determine the net profits derived from the exploitation of such wasting assets without taking into consideration the depletion of such assets resulting from lapse of time or from necessary consumption of such assets incidental to their exploitation. Before payment of any dividend or making any distribution of profits, there may be set aside out of the surplus or net profits of the corporation such sum or sums as the Board of Directors, from time to time, in its absolute discretion, thinks proper as a reserve fund to meet contingencies, or for such other purpose as the Board shall think conducive to the interests of the corporation, and any reserve so established may be abolished and restored to the surplus account by like action of the Board.

SECTION 2. Transfers of Shares.

Transfers of shares shall be made only upon the books of the corporation by the holder, in person, or by power of attorney duly executed and filed with the Secretary of the corporation, and on the surrender of the certificate or certificates of such shares, properly assigned.

SECTION 3. Lost, Stolen or Destroyed Certificates.

Whenever a person to whom a certificate of stock of the corporation has been issued alleges that it has been lost, stolen or destroyed, he shall file in the office of the corporation an affidavit setting forth the time, place and circumstances of the loss, theft or destruction to the best of his knowledge and belief and the Board of Directors or a duly authorized officer way, in their discretion, require the owner of the lost or destroyed certificate, or his legal representatives to deliver a bond to the corporation, in such sum as the Board of Directors or a duly authorized officer may direct or approve, with one or more sufficient sureties, approved by said Board or such officer, conditioned to indemnify the corporation and all persons against any claim that may be made against it or them on account of the alleged loss or theft of any such certificate, or in consequence of a new certificate being issued in lieu of the certificate alleged to have been lost, stolen or destroyed. The Board of Directors may delegate authority to the President or any Vice President of the corporation to require an indemnity bond and to fix or approve the amount of such bond and to pass upon the responsibility of the surety executing such bond.

SECTION 4. Transfer Agent and Registrar; Regulations.

The corporation shall, if and whenever the Board of Directors shall so determine, maintain one or more transfer offices or agencies, each in charge of a transfer agent designated by the Board of Directors, where the shares of the capital stock of the corporation shall be directly-transferable, and also one or more registry offices, each in charge of a registrar designated by the Board of Directors, where such shares of stock shall be registered, and no certificate for shares of the capital stock of the corporation in respect of which a transfer agent and registrar shall have been designated, shall be valid unless countersigned by such transfer agent and registered by such registrar. The Board of Directors may also make such additional rules and regulations as it may deem expedient concerning the issue, transfer and registration of certificates for shares of the capital stock of the corporation.

ARTICLE VI

SEAL

The Seal of the corporation shall bear the corporate name of the corporation engraved in a circle, inside of which words shall appear the words "Corporate Seal, Delaware."

ARTICLE VII

WAIVER

Whenever any notice whatever is required to be given by statute or under the provisions of the Certificate of Incorporation, or By-Laws of this corporation, a waiver thereof in writing or by telegram signed or sent by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent thereto.

ARTICLE VIII

FISCAL YEAR

The fiscal year of the corporation shall begin with January first and end with December thirty-first.

ARTICLE IX

AMENDMENTS

The Board of Directors from time to time shall have the power to make, alter, amend or repeal any and all of the By-Laws at any regular or special meeting by the affirmative vote of all the directors, or, if notice of the regular or special meeting shall have stated that the alteration, amendment or repeal of the By-laws is one of the purposes of the meeting, then by the affirmative vote of a majority of all the directors, but any By-Laws so made, altered, amended or repealed by the Board of Directors may be altered or repealed by the stockholders.

ADOPTED: April 27, 1953



I, John N. MrBowell, Secretary of State of the State of Delaware, do hereby certify that the above and foregoing is a true and correct copy of

Certificate of Agreement of Consolidation between the "PARK UTAH CONSOLIDATED MINES COMPANY", a corporation organized and existing under the laws of the State of Delaware and "SLLVER KING COALITION MINES COMPANY", a corporation organized and existing under the laws of the State of Nevada forming a new company under the name of "UNITED PARK CITY MINES COMPANY" as received and filed in this office the eighth day of May, A.D. 1953, at 11 o'clock A.M.;

And I do hereby further certify that the aforesaid Corporation shall be governed by the laws of the State of Delaware.

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Burton S. Heal,

Recorder of

Deeds for New Castle County, Delaware, do hereby certify that Certified Copy of

Certificate of Agreement of Consolidation between the PARK UTAH CONSOLIDATED MINES COMPANY", a corporation organized and existing under the laws of the State of Delaware and "SILVER KING COALITION MINES COMPANY", a corporation organized and existing under the laws of the State of Nevada forming a new company under the name of "UNITED of the State of Nevada forming a new company under the name of the PARK CITY MINES COMPANY", as received and filled in the Office of the Secretary of State the eighth day of May A. D. 1953

was received for record in this office on

May 8, 1953

and the same appears of record in the Recorder's Office for said County.

Witness my hand and Official Seal, this Eighth

May, A.D. 1953.

day of



STATE OF UTAH

COUNTY OF SALT LAKE

CO400032

I, Alvin Keddington, Clerk in and for the County of Salt Lake and Ex-Officio Clerk of the District Court of the Third Judicial District in and for Salt Lake County, State of Utah, do hereby certify that the foregoing is a full, true and correct copy of the original agreement of Consolidation and Articles of Incorporation

Merging: Park Utah Consolidated Mines Company, a Delaware Corporation qualified in the State of Utah No. 928, and Silver King Coalition Mines Company, a Nevada Corporation qualified in the State of Utah No. 山3

Into

United Park City Mines Company - not qualified in the State of Utah, the surviving Corporation

No. 3269

(Delaware) (Foreign)

as appears of record in my office.

IN WITNESS WHEREOF, I have hereur	ito set my hand
and affixed my official seal, this	13th
day of May	., A. D. 19 53
	Clerk
By Helen Playa	Deputy Clerk
	· ·

STATE OF DELAWARE OFFICE OF SECRETARY OF STATE

I, WALTER DENT SMITH, Secretary of State of the State of Delaware, do hereby certify that the above and foregoing is a true and correct copy of Certificate of Agreement of Merger and Consolidation between the "ONTARIO" SILVER MINING COMPANY", and "PARK UTAH CONSOLIDATED MINES COMPANY", under the name of the "PARK UTAH CONSOLIDATED MINES COMPANY", as received and filed in this office the minth day of July, A. D. 1936, at 11 o'clock A.M.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal at Dover, this ninth day of July in the year of our Lord one thousand nine hundred and thirty-six.

(Seal)

WALTER DENT SMITH
Secretary of State

ENDORSED

NUMBER 928 Foreign

STATE OF UTAH
SALT LAKE COUNTY CORPORATION

Agreement of Merger between the Ontario Silver xxxxiixiix mexhadiland between the Ontario Silver Mining Company and the

PARK UTAH CONSOLIDATED MINES COMPANY

Filed in the Clerk's office, Salt Lake County, Utah.

April 13, 1939

WILLIAM J. KORTH COUNTY CLERK.

By Geneva Caldwell
Deputy Clerk.

STATE OF UTAH

COUNTY OF SALT LAKE

I, William J. Korth, Clerk in and for the County of Salt Lake and Ex-Officio Clerk of the District Court of the Third Judicial District in and for Salt Lake County, State of Utah, do hereby certify that the foregoing is a full, true and correct copy of the maintain.

CERTIFIED COFY OF AGREEMENT OF MERGER AND CONSOLIDATION BETWEEN THE ONTARIO SILVER MINING COMPANY AND PARK UTAH CONSOLIDATED MINES COMPANY, UNDER THE NAME OF THE

PARK UTAH CONSOLIDATED MINES COMPANY (Delaware)

Number 928 Foreign

as appears of record in my office.

IN WITNESS WHEREOF,	have hereunto set my hand
and affixed my official	seal, this 15th
day of April	A. D. 193.9
William J.	Kor.th Clerk
By Gleneva Cl	elevel Deputy Clerk

	7.7.			
5TA	TE OF	NEVAD	A,)
•	•	NEVAD County of	f Ormst	y,∫ °°
	<i>I</i>	R.Q.P	atters	ion,
ı nd	ex-offic	io Clerk	of the	Distric

1. Halla	ratterson,		isog county, state of Nevaua,
and ex-officio Cler	k of the Dist	rict Court, in and for the County	of Ormsby, do hereby certify
		and correct copy of the original Art	
phich now remains	on file and of	rêcord in my office in Carson City, i	n said county.
		In testimony whereof, I have here	eunto set my hand and affixed
		my official Seal, at Carson	City, in said County and State
(SEAL)	•	this 20th day of	May
		E.O.Patterson,	

I, W.G.Douglass,	, the duly elected, qualified and
acting Secretary of State of the	State of Nevada, do hereby cer-
tify that the foregoing	is a true, full and correct
copy of the original certified co	py of the articles of incorporation
of the "SILVER KING COALITION	MINES COMPANY"+++

now on file and of record in this office.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Great Seal of State, at my office, in Carson City, Nevada, this Ist day of June, , A. D. 190 7_

W.G.Douglass,

Secretary of State.

was	duly incorpora	sted under the law:	s of DELAWAI	₹Ē		•	on the
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THE PROPERTY OF THE PROPERTY O

United States of America,

John Clerk of the Probate Court in and for the aforesaid County, under and by the direction of Calias a South , Judge of the said Court, do hereby certify that on Mounter 20 ad 1884 the Waly Mining Company " has duly filed in my said office the Agreement of Incorporation, duly acknowledged, together with the oath of the incorporators and oath of office and bond of each officer, as required by acts of the Governor and Legislative Assembly of the Territory of Utah, entitled "An Act Compiling and Amending the Laws relating to Private Corporations," approved

March 13th, 1884.

In witness whereof I have hereunto set my hand and affixed the seal of said Court, this 22 and of Hovember 1884.

TERRITORY OF UTAH, COUNTY OF SALT LAKE,

I hereby approve of the issuance of the foregoing Certificate.

Elias a Smith Probute Judge.

United States of America,

TERRITORY OF UTAH,

Court in and for the aforesaid County, under and by the direction of Hon.

Elicis a Secretary, Judgé of the said Court, do hereby certify that are Movember 22 and 1864 the Daly Missing Court, Company has duly filed in my said office the Agreement of Incorporation, duly acknowledged, together with the oath of the incorporators and oath of office and bond of each officer as required by acts of the Governor and Legislative Assembly of the Territory of Utah, entitled "An Act Computing and Amending the Laws relating to Private Corporations," approved March 13th, 1884.

(Seul)

In witness whereof I have hereunto set

my hand and affixed the seal of said

Court, this 25 day

of November 1884.

John b buitter Probute Clerk.

TERRITORY OF UTAH, COUNTY OF SALT LAKE,

I hereby approve of the issuance of the foregoing Certificate.

Elias a Smith

Probate Judge.

BLEU TO ERBERTE

County of Salt Lake.

I, JOHN C. CUPLER, Clerk of the Probate Court in and for the County of Salt Lake, in the Territory of Utah, do hereby certify that the foregoing is a full, true and correct copy of the certicle Tuesparation of the "Daly Mining Company on and Contificate as appears of record in my office.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Court, this

23 maday of Movember A.D. 1884 Probate Clerk.

Deputy

6705-16 Rev. 6-86 sp-CM0025 6-86

> NORMAN H. BANGERTER, GOVERNOR WILLIAM E. DUNN, EXECUTIVE DIRECTOR



STATE OF UTAH DEPARTMENT OF BUSINESS REGULATION

RESPONSE DATE 12-17-87 FILE #DB_ 7023		
THIS IS IN RESPONSE TO YOUR INQUIRY OF		
 THE RECORDS OF THIS OFFICE INDICATE THAT PARK CITY VENTURES - copy of exact of the copy of	cpired	DBA
 IS NOT OF RECORD IN THIS OFFICE AS EITHER A UTAH DOMESTIC OR FOREIGN CORPORATION.		
 IS A UTAH CORPORATION INCORPORATED		
 IS A CORPORATION QUALIFIED TO DO BUSINESS IN UTAH		
 IS IN GOOD STANDING. THE FEE FOR A CERTIFICATE OF GOOD STANDING IS \$10.00.		
 A STATEMENT OF THE NAMES AND ADDRESSES OF THE REGISTERED AGENT, DIRECTORS & OFFICERS IS ON FILE IN THIS OFFICE. A COPY OF THIS REPORT MAY BE OBTAINED FOR \$1.00.	•	
 A STATEMENT OF THE NAMES AND ADDRESSES OF THE REGISTERED AGENT, DIRECTORS AND OFFICERS HAS NOT BEEN FILED WITH THIS OFFICE.		
 AN AGENT FOR SERVICE OF PROCESS HAS NOT BEEN ASSIGNED.		
 IS DELINQUENT IN FILING IT'S ANNUAL REPORT.		
 WAS SUSPENDED		
 WAS DISSOLVEDINVOLUNTARILYVOLUNTARILY, DISSOLUTION DATE		
 WITHDREW FROM UTAH		
 HAD ITS CERTIFICATE OF AUTHORITY REVOKED		
 CHARTER EXPIRED		
 MERGED INTO DATE		
 COPIES OF BYLAWS AND NAMES OF THE SHAREHOLDERS ARE NOT ON FILE IN THIS OFFICE.		
 OTHER		
IF YOU HAVE ANY FURTHER QUESTIONS PLEASE REFER TO THE FILE NUMBER LISTED ABOVE IN FUTURE INQUIRIES.		
THANK YOU,		
DJ		
Office Specialist		

7023] 00400043

Filing Fee: \$1.00

CERTIFICATE

(Regarding transacting of business under an assumed name)

The undersigned who are (is) carrying on conducting or transacting business under an accordance name, certify that the assumed name is PARK CITY VENTURES, a partnership

Complete Address.

Park City Ventures

1849 West North Temple

Salt Lake City, Utah 84116

And that the full true name or names, of the person or persons owning and the lenson or persons currying on, conduting or transacting such business with their post office addresses are as follows:

Names	Acattesses					
The Anaconda Company, a general	25 Broadway					
partner	New York, New York 10004					
American Smelting and Refining Co.,	120 Broadway					
a general partner	New York, New York 10005					
. 						
	Signatures of persons named above					

THE ANACONDA COMPANY

AMERICAN SMELTING AND REFINING COMPANY

00400044

POR ENTERNANCE OF THE PROPERTY
£20L#

ATLANTIC RICHFIELD COMPANY DE 114762 STATUS: GOOD STANDING CODE: 0 TYPE: 15 PROFIT: P DATE: 00/00/00 FOREIGN CORP. NAME: REG. AGENT: C T CORPORATION SYSTEM INCORP - ACT - DATE: 04/30/1985 AGNT-CHG-DATE: 00/00/00 REINS-DATE: 00/00/00 136 SO MAIN STREET # 608 SALT LAKE CITY, UT PREV-RES-DATE: 00/00/00 INACTIVE -DATE: 00/00/00 84101 01/04/99 00/00/00 ANN-RPT-DATE: AGENT-ADDR: 00/00/00 00/00/00 PROF-RTT-DATE: INTENT TO: RESIGN-DATE: PRESIDENT/DIRECTOR VICE PRESIDENT/TREASURER SECRETARY ROBERT E. WYCOFF CAARON COOPER HOWARD L. EDWARDS 515 SOUTH PLOWER STREET 515 SOUTH FLOWER STREET 515 SOUTH FLOWER STREET LOS AMGELES, CALIFORNIA LOS ANGELES, CALIFORNIA LOS ANGELES, CALIFORNIA 90071 OFFR-RES: 00/00/00 90071 OFFR-RES: 00/00/00 90071 CFFR-RES: 00/00/00 CORPORATION TYPE: F CORPORATION KIND: 04 REMARKS: Y 545,010,784 STATED CAPITAL: ADDITIONAL SHARES: Y

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CLASS

COMMON

PREFERENCE

AUTHORIZED ISSUED

DATE MUMBER DATE MUMPER
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12/31/87 245,714 01/04/89 1,913,191

2-SCREEN 2; R-REMARYS; F-FORMARD; B-BACK

* * REMARKS * *

- 6-3-35 MERGER OF ATLANTIC RICHFIELD COMPANY FILE #27931 INTO ATLANTIC RICHFIELD DELAWARE CORPORATION, A DELAWARE CORPORTION (MOME STATE
- 03 5-7-85) CHANGE OF NAME TO ATLANTIC RICHFIELD COMPANY, FORMERLY KNOWN AS
- 04 ATLANTIC RICHFIELD DELAWARE CORPORATION
- 7-13-35 CERTIFICATE OF RETIREMENT OF SHARES

1-SCREEN 1; 2-SCREEN 2; R-UPDATE BRMARKS

C27931 ATLANTIC RICHFIELD STATUS: MERGED FOREIGN CORP. NAME:	DATE: 06/03	/85 CODE	: 0 TYPE: 50	PA D PROFIT: P
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REMARKS: Y STATED CAPITAL: 1541,225,484

ADDITIONAL SHARES: Y AUTHORIZED ISSUED

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2-SCREEN 2; R-REMARKS; F-FORWARD; B-BACK _

REMARKS

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9-2-52 AMENDED ARTICLES OF INCORPORATION
01
     5-11-56 AMENDED ARTICLES OF INCORPORATION
02
     6-14-61 AMENDED ARTICLES OF INCORPORATION
     5-16-66 CHANGE OF NAME TO ATLANTIC RICHFIELD COMPANY
     4-18-68 TWO CERTIFIED COPIES FILED AS TO STOCK
05
     8-15-68 FILED CERTIFIED COPY OF AMENDMENT
Οó
     5-28-68 CERTIFIED COPY OF MERGER OF SINCLAIR OIL CORPORATION (N.Y. & QU.)
07
     INTO ATLANTIC RICHFIELD COMPANY
06
     2-2-70 CERTIFIED COPY OF REDUCTION OF AUTHORIZED SHARES
09
10
     2-16-71 AMENDED ARTICLES OF REDUCTION OF SHARES
11
     1-22-73 CERTIFIED COPY OF REDUCTION OF SHARES
     2-11-74 CERTIFIED COPY OF REDUCTION OF SHARES
12
13
     1-14-75 CERTIFIED COPY OF REDUCTION OF SHARES
14
     1-12-76 CERTIFIED COPY OF REDUCTION OF SHARES
     6-14-76 INCREASED AUTHORIZED SHARES OF COMMON TO 150,000,000 @ $5.00 PAR 1-29-77 DECREASED AUTHORIZED SHARES TO 1,020,536 PREFERENCE @ $1.00 PAR
15
16
     & 15,220,677 CUM PREFERRENCE @ $1.00 PAR, RETAINING 150,000,000 SHARES OF
17
     COMMÓN @ $5.00 PAR & 352,000 PREFERRED @ $100.00 PAR 2-22-77 DECREASED AUTHORIZED SHARES TO 150,000,000 COMMON. 352,000
18
19
     PREFERRED 1,020,536 PREFERENCE AND 15,330,677 PREFERENCE STOCK
20
          ** MORE EXIST ** "REL" FOR NEXT ONE; OTHERWISE HIT "HELP"
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01

3-19-79 DECREASED AUTHORIZED SHARES TO PREFERRED TO 11,052,611 VARIABLE PAR

02 RETAINING 150,000,000 COMMON € \$5.00 PAR 03 3-14-30 DECREASED AUTHORIZED SHARES OF PREFERRED TO 8,796.151 VARIABLE 04 PAR, RETAINING 150,000,000 COMMON @ \$5.00 PAR 05 9-11-60 INCREASED AUTHORIZED SHARES OF COMMON TO 300,000,000 6 \$.250 PAR Ũΰ RETAINING 8,796,151 VARIABLE PAR 07 2-23-81 CERTIFICATE OF REDUCTION OF AUTHORIZED SHARES TO 7,277,773 PREFERRED @ VARIABLE PAR, RETAINING 300,000,000 COMMON @ \$2.50 PAR Úδ 2-16-82 CERTIFICATE OF REDUCTION OF AUTHORIZED SHARES TO 6,773,479 09 10 PREFERRED @ VARIABLE PAR, RETAINING 3000,000,000 COMMON @ \$2.50 PAR AND 11 352,000 PERFERRED @ VARIABLE PAR 12 3-3-82 MERGER OF THE ANACONDA COMPANY, A DELAWARE CORP. #70154 INTO ATLANTIC RICHFIELD COMPANY, A PA CORP. THE SURVIVOR, (HOME STATE 12-24-81) 13 2-21-83 STATEMENT OF REDUCTION OF SHARES TO 6,712,381 @ VARIALBE PAR, 14 RETAINING 300,000,000 COMMON € \$2.50 PAR 15 16 2-28-84 REDUCTION OF AUTHORIZED SHARES TO 6.377.484 PREFERRED @ VARIABLE 17 PAR & 300,000,000 COMMON @ \$2.50 PAR 10-9-84 INCREASED AUTHORIZED SHARES OF COMMON TO 600,000,000 @ \$2.50 PAR. 13 RETAINING 6,377,484 PREFERRED @ VARIABLE PAR 19 20 3-25-85 STATEMENT OF REDUCTION OF SHARES, DECREASING PREFERENCE STOCK TO

** MORE EXIST ** "REL" FOR NEXT ONE; OTHERWISE HIT "HELP"

01

5,709,185 RETAINING 600,000,000 CCMMON @ \$2.50 PAR 6-3-85 MERGED INTO ATLANTIC RICHFIELD DELAWARE CORPORATION A DELAWARE CORP. THE SURVIVOR (HOME STATE 5-7-85) SEE FILE #114962 02

03

1-SCREEN 1; 2-SCREEN 2; R-UPDATE REMARKS

OF THEIR ANNIVERSARY DATE. FAILURE TO DO SO WILL RESULT IN

SUSPENSION OF THE CORPORATIONS CHARTER.



DEPARTMENT OF BUSINESS REGULATION OF DIVISION OF CORPORATIONS AND COMMERCIAL CODE

00400051

Rev. 1/86 STATE OF UTAH

CORPORATION ANNUAL REPORT

In compliance with Section 16-10-121 & 122, and Section 16-10-12 or 16-10-110. U.C.A., 1953, the following report and if applicable the

88	statement of change of registered office and/or agent	is submitted: (PLE	ASE TYPE OR PRINT CLEA	RLY!)
1.	ITEM #1 MUST BE COMPLETED	09	17077	(MF)
	EXACT CORPORATE NAME The Anaconda Co	ompany	3382	\bigcirc
	REGISTERED AGENT CT Corporation 5	lystem	— —	
	REGISTERED DEFICE 170 bouth Maine,	Suite 150	PEOPLE NEW YORK	<i>'</i> -ب
2.	IF NEW REGISTERED AGENT AND/OR OFFICE, PLEASE C	COMPLETE	MAR 13	1987
	New Registered Agent		/Renister	ed agent's signature) _
	New Registered Office	,		_ State UTAH Zip
	(Street Address)			_ 0.010
	(With the above change, the address of the registered office and the address of		•	
3.	INCORPORATED UNDER THE LAWS OF North Do	ikota		(STATE OR COUNTRY).
4.	IF INCORPORATED OUTSIDE THE STATE OF UTAH, GIVE COUNTRY OF INCORPORATION.	THE ADDRES	S OF THE PRINCIPAL	OFFICE IN THE STATE OR
	4	· · ·	State or	ND zip 5850
	314 E. Thayer Avenue (Street Address)	City Diam	arck Country	
5.	TYPE OF BUSINESS CONDUCTED IN UTAH	true No	emeholder	
6.	NAMES AND RESPECTIVE ADDRESSES OF THE OFFICER	S. REET ADDRESS	CITY	, STATE, ZIP
	President Vice-President Secretary Treasurer Secretary	-		
7.	DIRECTORS: (UTAH LAW REQUIRES AT LEAST 3 DIRECT			
		REET ADDRESS	CITY	, STATE, ZIP
	SCHEDULE 3.	E A-	TTACH	ED
8.	AUTHORIZED SHARES (DO NOT CHANGE THE INFORMA	TION LISTED.)		
	Number of Shares Itemized Series, Authorized By Class Within A		Par Value Of Shares	Number of Shares Without Par Value
•	1,000 Common		# 1-00	Ø
9.	NUMBER OF SHARES ISSUED (MUST BE COMPLETED) Number of Shares Itemized Series,	-	Par Value	Number of Shares
	Issued By Class Within A	A Class	Of Shares	Without Par Value
	1,000 Common -		4 1.00	4
0.	STATED CAPITAL AS OF DATE OF THIS REPORT (Number Under the penalties of perjury and as an authorized officer, I declare that this annual been examined by me and is, to the best of my knowledge and belief, true	nual report and, if app	plicable, the statement of cha	
1.	BY Louis & Batter to Authorized Officer	12. <u>Louis</u>	5. Rattota, Ac	osistant Secretary
	("If Registered Agent and/or Registered Office has been changed on this form, said change must be authorized by a resolution adopted by the Board of Directors, and The President or Vice President must sign the report.)	13. DATE	Lyreary	<u> 19</u> 87
FES	E \$5.00	Send Report &	Annual Report Secti	on
	ke Check payable to Annual Report Section RSUANT TO SECTIONS 16-10-121 and 122, U.C.A., ALL CORPORA-	remnance 10:	160 EAST 300 SOUTH P.O. Box 45801	
	NO MILET EILE THEID ANNITAL DEDODTE WITCH THE MONTH		Salt Lake City 1 Itah 84	145_0801

DO NOT CHANGE OR ALTER THIS FORM

(801) 530-6012

Sis

6a7571

COMPANY	NAME	The	Ana	cond	a (b	lmoa	n.J
F.E.I.N.				89585			7

LIST OF OFFICERS & DIRECTORS

NAME			
TITLE BUSINESS ADDRESS	HOME ADDRESS	S.S. NUMBER	TENURE
HENRY H. PAIGE Director and President 515 S. Flower Street Los Angeles, CA 90071	1540 Kenmore Rd. Pasadena, CA 91106	294-28-7311	12/02/85 thru 12/07/87
KENNETH R. DICKERSON Director and Vice President 515 S. Flower Street Los Angeles, CA 90071	655 Hillcrest Ave. LaCanada-Flintridge, CA 91011	462-50-1342	12/02/85 thru 12/07/87
HOWARD L. EDWARDS Directors, Vice President, Secretary 515 S. Flower Street Los Angeles, CA 90071	756 Greenridge Dr. LaCanada-Flintridge, CA 91011	543-26-3665	12/02/85 thru 12/07/87
MARIE L. KNOWLES Treasurer 515 S. Flower Street Los Angeles, CA 90071	5614 Naples Canal Long Beach, CA 90803	- 565-70- 7 053	09/22/86 thru 12/07/87
BERALD D. SECUNDY Assistant Treasurer 515 S. Flower Street Los Angeles, CA 90071	222 S. Grand Ave. Pasadena, CA 91105	579-54-3472	12/02/85 thru 12/07/87
LOUIS S. BATTISTA Assistant Secretary 515 S. Flower Street Los Angeles, CA 90071	1555 Knollwood Terrace Pasademaa. CA 91105	072-34-5860	09/01/86 thru 12/07/87
BARBARA M. HINDS Assistant Secretary 515 S. Flower Street Los Angeles, CA 90071	694 Frantier Ct. Anaheim Hills, CA 92807	547-78-5178	12/02/95 thru 12/07/87

PAP 12/27/86 Nameholders

ARCO 4

Finance 515 South Flower Street Mailing Address. Box 2679 - T.A. Los Angeles, California 90051 Telephone 213 486 1416 697077

Iris R. Robin, CPA Manager State Income and Franchise Tax

February 25 1987
Annual Report Section
160 East 300 South and Floor
P.O. Box 45801
Salt Lake City UT 84145-0801
Re: The Apacanda Company
Federal I.D. No.: 13- 289.58.58
State Reference:
Gentlemen:
Enclosed is our Corporation Annual Report
as required by your office
for the year 1987 together with check number 4168
payable to Annual Report Section - Utah
in the amount of \$ 5.00
Please address all correspondence to:
The Angeonda Company
c/o Atlantic Richfield Company Tax Department - AP-4821
515 South Flower Street Los Angeles, California 90071
Any questions concerning this report may be addressed to the report preparer indicated below.
Sincerely,
flus Masin
Iris R. Robin
IRR:sw Enclosure Report Prepare: Pres File No.: 0005 - 059 - 5801
Form 10

-097077 ANA	CONDA COMPANY,	THE	•					$\mathbf{n} \cdot \mathbf{p}$
STATUS: GOOD	STANDING	. DATE:	00/00/00	CODE	: 0	TYPE: 15	PROF]	IT: P
FOREIGN CORP.	NAME:	- *						
	C T CORPORATION							
135 SO MAIN	STREET # 608							/00/00
SALT LAKE O	CITY, UT	PREV - RES -I	DATE: 00/	(00/00	IMACT	IVE -DATE	: 00/	/00/00
84101		AGENT-ADD	R: 00/	(00/00	AMM-P	PT-DATE:	037	/13/87
INTENT TO:	ŕ	RESIGN-DA'	TE: 00/	/00/00-	PROF-	RPT - DATE	: 00/	/ኅኃ/ኅኅ
PRESIDENT/DI	IRECTOR	V ?RES/SEC	RETARY/DI	[PECTOR	TRE	ASUPER		
HENRY H. PAI	[GE	HOMARD L. 1	EDWARDS		MA R	IE L. KN		
	JER ST.	515 SO. FLO						
	, <u>CA</u> .	LOS ANGELES						
•	-RES: 00/00/00	90071 OFF			000	71 OFFR	'-RES: (10/00/00
CORPORATION	TYPE: F	CORPORATIO	M KIND: () 4				
REN	MARKS: N	STAT	ED CAPITA	λŢ. :	1	.000	•	
ADDITIONAL SH	MARKS: N MARES: N PAR VALUE		AUTHORI7	25 D	•	,	ISSUED	
CLASS	PAR VALUE	DA T	E	NUMP	見良	DATE		MUMDER
COMMON	1.0000	00/00	/00	1,0	000	03/13/97	7 •	1,000
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		2_S	EN 2; R-	REMARKS	. F_F	ORMARD:	B-BACK	
		2-00.112	i= i - ;		,	,		_

ANACONDA COMPANY, THE

STATUS: MER	GED	DATE: 03/0	3/92 CODE	: 0 TYP5: 7"	PROFIT: P
FOREIGN COR	P. HAME:				
REG. AGENT:	C T CORPORATION	SYSTEM		INCORP - ACT - DATE	: 03/21/1975
136 SO MAI	IN STREET # 608	AGNT-CHG-DATE:	00/00/00	REIMS - DATE:	00/00/00
SALT LAKE	CITY, UT	PREV-RES-DATE:	00/00/00	IMACTIVE - DATE:	00/00/00
04101	,	AGENT - ADDR:	00/00/00	ANN-RPT-DATE:	09/31/76
INTERT TO:		RESIGN-DATE:	00/00/00	PROF-RRT-DATE:	00/00/00
PRESIDENT/	DIRECTOR	VICE PRESIDENT/	DIRECTOR	SECRUTARY	
RALPH F. C	OX	JAMES L. MARVIN		PAUL S. BILGO	رن. د
555 17TH S	TREET	555 17TH STREET		555 1774 STPE	ITT
DEMVER, CO				DENVER, GO	
	R-RES: 00/00/00	80217 OFFR-RES		30217 OFF3-9	RES: 00/00/00
CORPORATIO	M TYPE: F	CORPORATION KIN	D: 04		
p	EMARKS: Y	STATED CA	PITAL:	^	
ADDITIONAL .	SHAPES: N	AUTH	ORIZED	IS	इंद्राहरू
CLASS	PAR VALUE	DATE	MUMB	ER DATE	מַתָּבֵייייייי
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C-10-77 MERGER OF ANACOMDA DELAWARE CORPOPATION, A DELAMORD TO ATLANTIC RICHFIELD DELAWARE COPPORATION THE THEIR NAME TO ANACOMDA COMPANY, THE.
C-0-02 MERGED INTO ATLANTIC RICHFIELD COMPANY, A PA CORPORT STATE 12-24-91) SEE FILE "027931 Sact. CORP. OUTLIFTED deninkus aha

01 2010 A

1-SCRIET 1; 0-SCREEN 2; R-TOOMER PRINCESO

##CORPORATION IMPORTATION

270317 ANACOMDA DELAMARE	
CTATUS: MERGED	DATE: 03/10/77 CODE: 0 TYPE: 50 PROFIT: P
FOREIGN CORP. MAME:	
REG. AGENT: C T CORPORATION	SYSTEM INCORP-ACT-DATE: 10/07/1076
136 SO HAIN STREET # 608	AGNT-CHG-DATE: 00/00/00 REINS-DATE: 00/00/00
SALT LAKE CITY, UT	PREV-RES-DATE: 00/00/00 IMACTIVE-DATE: 00/00/00
34101	AGENT - ADDR: 00/00/00 AMM - RPT - DATE: 10/07/76
INTENT TO:	RESIGN-DATE: 00/00/00 PROF-RPT-DATE: 00/00/00
	VICE PRESIDENT/DIRECTOR SECRETARY/TREASURE
WILLIAM D. MILLER	RICHARD B. STEIMMETZ, JR. L. THOMAS HOUSER
1271 AVE OF THE AMERICAS	1271 AVE OF THE AMERICAS 1271 AVE OF THE AMERICAS
NEW YORK, NEW YORK	NEW YORK, NEW YORK MEN YORK, NEW YORK
00000 OFFR-RES: 00/00/00	00000 OFFR-RES: 00/00/00 00000 OFFR-RES: 00/00/00
CORPORATION TYPE: F	CORPORATION KIND: 04
BEMARKS: Y	STATED CAPITAL:
REMARKS: Y ADDITIONAL SHARES: N	STATED CAPITAL: 0 AUTUOPIZED ISSUED
CLASS PAR VALUE	DATE MUMBER DATE MUMBER
COMMON 1.0000	09/00/00 1,000 00/00/00 0
•0000	00/00/00 0 0 00/00/00 0

2-SCREET 2; R-REMARKS; F-FORWARD; D-PACK _

REMAPKS * *

- **91** 3-10-77 MERGED INTO ATLANTIC RICHFIELD DELAWARE CORPORATION, A DEL. CORP.
- 2 QUALIFIED THE SURVIVOR INCREASING AUTHORIZED SHARES TO 75,,000,000
-)2)3 COMMON 9 \$1.00 PAR & 25,000,000 VOTING PREFERRED 9 \$1.00 PARR & 0.4
 - 25,000,000 NON-VOTING PREFERRED 9 \$1.00 PAR (HOME STATE 2-3-77)
- THE SURVIVOR, FILE #070154 35

1-SCREEN 1; 2-SCREEN 2; R-MPDATT REMARKS

025035 AMACONDA COMPANY,	THE		11T
STATUS: MERGED	DATE: 03/10/77 CODE	: 0 TYPE: 50 PROFI	r: P
FOREIGN CORP. NAME:			
REG. AGENT: C T CORPORATION	SYSTEM	INCORP-ACT-DATE: 10/	04/1948
136 SO MAIN STREET # 608	AGNT-CHG-DATE: 00/00/00	REINS - DATE: 00/	10/10
SALT LAKE CITY, UT	PREV-RES-DATE: 00/00/00	INACTIVE - DATE: 00/)0\00
	AGENT-ADDR: 00/00/00		2月入れる
INTENT TO:	RESIGN-DATE: 00/00/00	PROF-RPT-DATE: 00/	77/00
DIRECTOR	DIRECTOR	PIRDCTOR	
CLYDE E. WEED	C. M. BRINCKERHOFF	E. S. MOGLOME	
25 BROADWAY		25 BROADMAY	
MEW YORK, MEW YORK	MEW YORK, NEW YORK		
00000 OFFP-RES: 00/00/00	00000 OFFR-RES: 00/00/00	00000 OFFR-PSS: 00	7/92/99
CORPORATION TYPE: F	CORPORATION KIND: 04		
REMARKS: Y	STATED CAPITAL:	0 = = = = =	
ADDITIONAL SHARES: N	AUTHORIZED		
CLASS - PAR VALUE	DATE		B . The B
.0000	00/00/00 15,000,0		. J
•0000	00/00/00	0 00/00/00	Ú

2-SCREET 2; 3-REMARKS; E-TORMARD; B-BACK

* * REMARKS * *

5-29-55 CHANGE OF MAME TO AMACCIDA COMPANY, THE 10-7-53 AGENT CHANGE TO GEORGE A. CRITCHLOW, & A. M. MATSOM , & MED MARNOCK OF 1320-1325 CONTINENTAL BANK BLDG. SLC, UTAY $\gamma \stackrel{\circ}{4}$ 9-19-60 AMENDMENT DEALING WITH THE MUMBER OF DIRECTORS 2-18-64 AMENDMENTS DECREASING THE CAPITAL STOCK 7-10-64 INCREASING AUTHORIZED SHARES TO 11,564,396 SMARES 2 050.00 PAP, % 15,000,000 SHARES AT MC PAR 2-30-57 INCREASING CAPITAL STOCK 29 9-5-69 RESTATED ARTICLES 1-2-73 MERGER OF INTERNATIONAL SMELTING AND REFINING CO. INTO AMACONDA CO. 10 THE SURVIVOR, SEE FILE #026085 11 3-10-77 MERGED INTO ANACOMDA DELAMARE CORPORATION A DEL. COPO. THE 12 SURVIVOR (HOME STATE 2-3-77) SEE FILE "070317 13

1-SCREEN 1; 2-SCREEN 2; P-UPDATE REMARKS

of the Sland	office of the Lieutenary Gavenn); = - ~				File in Du	plicate
an Start	Lieuten Gvernor FAPPLIC	ATION FOR	CERTIFIC.	ATE OF AUTH	ORITY		Q 17 4
Filing Clerk		THE	E ANACONI	DA COMPANY			370
		(exac	t corporate i	rame)			
1.	A corporation of the state of hereby applies for a Certific			, incorporated F business in the state			<u>9 77</u> =
· 2.	The Corporation period of	duration isD	erpetual			487/200 JU	KEC
3.	The address of the corporat	ion in the state o	f incorporati	ion is		- 8	' <u>iii</u>
4.	The registered agent in Utal C T CORPORATION SY C/O C T COrporation	STEM, 17	5 South !	e registered office in Main Street, e City, Utah			NED
	0,0011011	oyoddiny					>
5.	The business purposes to be	pursued in Utah	are:D	iversified	natural	resource	es company
6.	The names and address of con Director Director Director President Vice President Secretary Treasurer	•	See attac	ched			
7,	The aggregate number of shares	res corporation h Class	as authority Series	to issue. (Itemize b	y class or serie	es if applicable	.)
	1,000	Common	-		ar value		
8.	The aggregate number of iss	Class	iize by classe Series	Par Value	1		
	.000	Common	-	51.00 p	ar value		
9.	Stated Capital: \$1,000	(see	section 16-10	0-2 [j] for definitio	on)		
10.	Estimate of value of all asset	ts corporation wi	ll own during	g next year. \$	-0-		
11.	Estimate of value of all assets in Utah next year. \$						
12.	Estimate of gross business corporation will transact next year everywhere.						
13.	Estimate of gross business co	orporation will tr	ansact next	year in Utah. S	-0-		
. 3.		od Standing of th	e state of in	corporation is attac	hed.		
00.8 ²	The Corporation shall use	its name in Utah its name as set fo	THE .	ANACONDA COME	ANY as this name is	not available (or use.)

(over)

Under penalties of perjury, I declare that this application for Certificate of Authority has been examined by me and is, to the best of my knowledge and belief, true, correct and complete.

W. C. BRADFORD, JRB Statement Vice President

SUGGESTIONS

16. The law requires payment of a corporation license fee at the rate of 1/20th of 1% of the dollar value of the total authorized shares of the corporation. There is a minimum fee of \$25.00 and a maximum of \$500.00. Domestic corporations can compute the license fee by multiplying the dollar value of the authorized shares by .0005, the decimal equivalent of 1/20th of 1%. For purposes of fee computation, no par stock is valued at \$1.00 per share.

Foreign Corporations are assessed license fees only on the portion of the shares represented in the state of Utah. The shares represented in Utah are computed as follows:

		·
Authorized Shares	Par Value	Value of Authorized
Item 7	Item 7	Shares
Value of Aught air J Stan	X	ed in A.
Value of Authorized Share.	X	=

Amendment If authorized shares are increased by amendment, additional fees may be due. Compute the fee according to the preceeding instructions. Subtract the amount of fee previously paid by the corporation. The difference is the license fee due at the time of filing the amendment.

General Instructions: A filing fee of \$25.00 is required for each filing. This is in addition to any license fee as computed above.

If these forms do not provide sufficient space for information pertinent to your company, please attach additional sheets of paper containing the information. Please feel free to contact the Secretary of State's office for any assistance which you or your lawyer may need in these matters.

DAVID S. MONSON
Lt. Governor/Secretary of State

CURRENT LIST OF OFFICERS AND DIRECTORS

OFFICERS & DIRECTORS	BUSINESS ADDRESS	RESIDENCE
J. A. BARBERA President & Director	100 West Tenth Street Wilmington, Delaware 19801	34 Ramblewood Drive Dartmouth Woods Wilmington, Delaware 19810
A. M. HORNE Vice President, Treasurer Assistant Secretary & Directo	r	904 Newport Pike Silview Wilmington, Delaware 19804
A. D. ATWELL Vice President, Secretary, Assistant Treasurer and Director	II .	Box 247 Odessa, Delaware 19730
G. J. COYLE Assistant Secretary and Assistant Treasurer	н	2233 East Huntington Drive Pinecrest Wilmington, Delaware 19808
W. C. BRADFORD, JR. Vice President	700 South Flower Street Los Angeles, California 90017	18732 Vikinos Way Cerritos, California 90701
J. CASKEY Assistant Secretary	u	16852 Blanton Huntington Beach, California 92649
	•	•



To all to whom these presents shall come,

Ι,	BEN	MEIER				······································	Secretary	of State
of the S	State	of North I	Dakota,	do hereby	certify	that		

THE ANACONDA COMPANY, a North Dakota Corporation, was incorporated in this office on February 23, 1977, has paid all fees due this office as required by North Dakota Statutes governing North Dakota Corporations, and

Therefore, THE ANACONDA COMPANY of Bismarck, North Dakota is in GOOD STANDING according to the records of this office as of this date.

> In Testimony Whereaf. I have hereunto set my hand and affixed the Great Seal of the State at the Capitol in the City of Bismarck, this 18th day of February A.D., 1982

SECRETARY OF STATE

CL STREET

DEPARTMENT OF BUSINESS REGULATION DIVISION OF CORPORATIONS AND COMMERCIAL CODE

00400065

6705-26 Rev. 1/86

Rev. 1/86 STATE OF UTAH

CORPORATION ANNUAL REPORT

MAR 11

In compliance with Section 16-10-121 & 122, and Section 16-10-12 or 16-10-110, U.C.A., 1953, the following report and if applicable the statement of change of registered office and/or agent is submitted: (PLEASE TYPE OR PRINT CLEARLY!)

1.	ITEM #1 MUST BE COMPLETE	D 064999 in:	:: U2/2//	15/5 F			
	EXACT CORPORATE NAME	AMERICAN	SMELTING,	AND REFINI	NG COMPAY	1X	
	REGISTERED AGENT	C T CORPOR					
	REGISTERED OFFICE	Salt Lake					
2.	IF NEW REGISTERED AGENT	AND/OR OFFIC	E, PLEASE (COMPLETE		MAR 4	1 2 87
	New Registered Agent	· · · · · · · · · · · · · · · · · · ·	····	/			
	New Registered Office		•		C:h.,	· · · · · · · · · · · · · · · · · · ·	ent's signature)
	New Registered Office	(Street A	Address)		City	State	e <u>-91711</u> 21p
	(With the above change, the address of	the registered office a	nd the address	of the business off	ice of the registe	ired agent are identi	cal.)
3.	INCORPORATED UNDER THE	LAWS OF	NE.	W JERSEY		(5	TATE OR COUNTRY
4.	COUNTRY OF INCORPORATION	ON.	UTAH, GIVE				
	28 West State St	·		City	nton	State or NEW	JERSEY Zip 08608
	(Street Addre	•		•			:
5.	TYPE OF BUSINESS CONDUC	TED IN UTAH _	IN	ACTIVE			
6.	NAMES AND RESPECTIVE AD	DRESSES OF TH		S. REET ADDRES:	S	CITY, STAT	E, ZIP
	President Vice-President Secretary Treasurer	SEE ATTACH	ED RIDER				
7.	DIRECTORS: (UTAH LAW REC	UIRES AT LEAS NAME		ORS.) REET ADDRES:	5	CITY, STAT	E, ZIP
	1.						
	2. 3.	SEE ATTACH	ED RIDER				
8.	AUTHORIZED SHARES (DO N Number of Shares	OT CHANGE TH Itemized	IE INFORMA Series.		-	/aiue	Number of Shares
	Authorized	By Class		A Class		nares	Without Par Value
		C			1.0	000	
9.	NUMBER OF SHARES ISSUED	•				000	
	Number of Shares Issued	Itemized By Class	Series. Within	If Any A Class	Par V Of St		Number of Shares Without Par Value
1000	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	COMMON		<u>, </u>	1.0	<u> </u>	
10.	STATED CAPITAL AS OF DATE		RT (Number	r of Shares Iss		7.00	0.00
	Under the penalties of perjury and as an a	uthorized officer. I dec	lare that this and	nual report and, if a	pplicable, the sta		registered office and/or ager
	has been examined by me and is, to the	best of my knowledge	e and belief, true	correct, and com	piete.		
44	BY)where		12	PRE	SIDENT	
11.	\)Authorize			14	0 /1	Title or Position	
	(*If Registered Agent and/or Registered C said change must be authorized by a r Directors, and The President or Vice Pre	esolution adopted by	the Board of	13. DATE		3/87 —————	19
声声	E \$5.00	,		Send Report 8		port Section	
	ke Check payable to Annual Rep	ort Section		nemiliance (0		00 SOUTH 2ND F	LOOR
*Pl	JRSUANT TO SECTIONS 16-10-121 a	nd 122, U.C.A., ALL			P.O. Box 45		201
TIC	ONS MUST FILE THEIR ANNUAL RE	PORTS WITHIN T	HE MONTH		Satt Lake C	ity, Utan 84145-08	OU 1

(801) 530-6012

OF THEIR ANNIVERSARY DATE. FAILURE TO DO SO WILL RESULT IN

SUSPENSION OF THE CORPORATIONS CHARTER.

AMERICAN SMELTING AND REFINING COMPANY CURRENT LIST OF OFFICERS AND DIRECTORS

OFFICERS AND DIRECTORS	BUSINESS ADDRESS	RESIDENCE		
J. A. BARBERA -	CORPORATION TRUST CENTER	34 Ramblewood Drive		
President & Director	1209 Orange Street Wilmington, DE 19801	Wilmington, DE 19810		
A. M. HORNE -	H	904 Newport Pike		
Vice President, Treasurer Assistant Secretary & Director		Wilmington, DE 19804		
A. D. ATWELL - Vice President, Secretary, Assistant Treasurer & Director	•	Вож 247, Rt. 9 Одевва, De 19730		
C. M. DENNY - Vice President and Assistant Secretary	*	137 Deer Run Road Townsend, DE 19734		
KIM E. LUTTHANS - Vice President and Assistant Secretary	•	312 Woodside Avenue Wilmington, DE 19809		

05/15/87

2-SCREEN 2; R-BEMARKS; F-FORWARD; B-BACK

CORPORATION INFORMATION

002554 ASARCO INCORPORATED. M.J. STATUS: GOOD STANDING DATE: 00/00/00 CODE: 0 TYPE: 54 PROFIT: P FOREIGN CORP. NAME: REG. AGENT: C T CORPORATION SYSTEM INCORP - ACT - DATE: 05/01/1939 136 SO MAIN STREET # 608 AGNT-CHG-DATE: 00/00/00 REINS-DATE: 00/00/00 SALT LAKE CITY, UT PREV-RES-DATE: 00/00/00 INACTIVE-DATE: 20/20/20 00/00/00-ANN-RPT-DATE: 34101 AGENT-ADDR: 05/15/37 INTENT TO: RESIGN-DATE: 00/00/00 PROF-PRT-DATE: 00/00/00 VICE PRESIDENT/SECRETARY CHAIRMAN/PRES/DIRECTOR VICE PRESIDENT/TREASURER RICHARD DEJ OSBORNE STEPHEN P. MCCANDLESS AUGUSTUS B. KIMSOLVING 180 MAIDEN LANE 180 MAIDEN LAME 190 MAIDEN LAME NEW YORK, NY MEW YORK, NY MEW YORK, MY 10039 OFFR-RES: 00/00/00 10033 OFFR-RES: 00/00/00 10038 CFFR-RES: 00/00/00 CORPORATION TYPE: F CORPORATION KIND: 04 REMARKS: N STATED CAPITAL: ISSUED ADDITIONAL SHARES: N AUTHORIZED PAR VALUE MUMBER CLASS DATE NUMBER DATE COMMON .0000 06/15/70 40,000,000 05/15/97 35,611,063 2,800

00/00/00

.0000

Filing	; Fee: \$25.00				File in Du	plicate
	APPLICAT	TION FOR CE	RTIFICATE C	F AUTHORITY		
5 . 0		SARCO INCO			G.A	999
of the Secretary of Ulah, on A.D. 19,2	A.		rporate name)		— 0±	ŭ U U
= = = = = = = = = = = = = = = = = = =	S A corporation of the state of	r New Jers	ev in	comorated January	17 20 IC	975
1 V V	hereby applies for:	Certificate of			(date)	24.J
State C			•		` '	
ੂ ਵੱ ਰ ਨੂੰ ਨੂੰ ਪ੍ਰ	The period of duration is	nernetusl				
- 1 de -	the period of duration is	Der De Guar		•		
3. 5	The address of the corporate	ion in the state of	incorporation is	15 Exchange	Place,	0000
State				Jersey City	ب الأولاد ال	11302 -
4.	The registered agent in Utal	and the street ac	dress of the regi	stered office in Utah is C	T CORPORA	ATION SYSTEM
•	175 South Main Street, c/c				<u> </u>	
5	List the business purposes w	which you intend	to pursue in Utal	n: <u>general mini</u>	ing and	<u>refiring</u>
						
6.	List the names and address	of your directors	and officers:			
	Director	,,		,,		
	Director	"SEE AT	TACHED RI	DER"	•	
	Director					
	President				ಡ	
	Vice President				975	<u></u>
	Secretary				7	
	Treasurer				-:	AFC.
7.	List the aggregate number o	f about which wa	u have airthariru	to ionia. Itamiza hy clas	ss or seried:	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
7.	if applicable.	i sitates witten yo	d liave additiontly	to isde. Itemize by the		31VIS Î
	Number of Shares	Class	Senes	Par Vaiue	5	ä
		_		\$1.00	نة	
	1,000	Common	-	\$ 50		
8.	List the aggregate number o	f issued shares. I	temize by classes	L		
	Number of Shares	Class	Series	Par Value		
	2000	_		43.00		
	1000:	Common		\$1.00		
9.	Stated Capital: \$ 1,000	0.00 (see s	section 16-10-1 (j) for definition)		
10.	Give estimate of value of all	assets comoratio	n will own durin	g next year. S 200	.00	
11.	Give estimate of value of all	assets in Utah ne	xt year. S	None		
12.	Give estimate of gross busin	ess you will trans	act next year eve	rywhere. S <u>None</u>		
13.	Give estimate of gross busin	ess you will trans	act next year in	Utah. S <u>None</u>		
. 14.	Attach a copy of Articles of of the state of incorporation		nd all amendmen	ts certified by the custod	ian thereof	
15.	The corporation will use as its name in Utah.	N/A	- 			

(over)

521/2893255685/193

		By:	Providem or Act President
_	DET 4444 DE		Secretary or Assistant Secretary
of	DELAWARE NEW CASTLE	- ss	
y of_	MEN CROILE	-	
ibed	and sworn to before me this _	18th day of Feb	ruary 19 75
М	commission expires	re, 25, 1976	
•	1		Linda L Set ik
-	* * * * * * * * * * * * * * * * * * *		Notary Public
			·
		ario de amio va	
		SUGGESTIONS	_
			-
Th	e law requires payment of a co	orporation license fee at the rate	e of 1/20th of 1% of the dollar value
		- ·	nimum fee of \$25.00 and a maximum of
\$50	00.00. Domestic corporations o	can compute the license fee by i	multiplying the dollar value of the
			1%. For purposes of fee computation,
по	par stock is valued at \$1.00 p	per share.	
		t license fees only on the portion inted in Utah are computed as f	on of the shares represented in the ollows:
sta			
sta	te of Utah. The shares represented the shares	nted in Utah are computed as f	ollows :
sta	te of Utah. The shares represented the shares	nted in Utah are computed as formula in Utah are computed as formula in Italian in Itali	ollows: = Value of Authorized
sta	te of Utah. The shares represented the shares	nted in Utah are computed as f	ollows :
A. B.	ltem 11 + Item 13 = Item 10 + Item 12 = Authorized Shares Item 7	Nted in Utah are computed as formula in the second	ollows: = Value of Authorized Shares
sta	ltem 11 + Item 13 = Item 10 + Item 12 = Authorized Shares Item 7	nted in Utah are computed as formula in Utah are computed as formula in Italian in Itali	ollows: = Value of Authorized Shares
A. B.	item 11 + item 13 ltem 10 + item 12 Authorized Shares ltem 7 Multiply the share value obt	Par Value Item 7	ollows:
A. B.	ltem 11 + Item 13 = Item 10 + Item 12 = Authorized Shares Item 7	Par Value Item 7	ollows:
A. B	ltem 11 + Item 13 = ltem 10 + Item 12 = Authorized Shares Item 7 Multiply the share value obtoxically share value of Authorized Shares	Par Value Item 7 tained in B by the percentage of Percentage from A	Value of Authorized Shares Obtained in A.
A. B.	item 11 + item 13 = item 10 + item 12 = Authorized Shares item 7 Multiply the share value obtained Watue of Authorized Shares Multiply the result obtained	Par Value Item 7 tained in B by the percentage of the control of	ollows:
A. B	ltem 11 + Item 13 = ltem 10 + Item 12 = Authorized Shares Item 7 Multiply the share value obtoxically share value of Authorized Shares	Par Value Item 7 tained in B by the percentage of the control of	Value of Authorized Shares Obtained in A.
A. B	ltem 11 + Item 13 ltem 10 + Item 12 Authorized Shares ltem 7 Multiply the share value obt Value of Authorized Shai Multiply the result obtained which is the license rate of the	Par Value Item 7 tained in B by the percentage of Percentage from . in C by .0005. This is the decide statute.	Value of Authorized Shares Obtained in A. A above A approxemal equivalent of 1/20th of 1%
A. B	ltem 11 + Item 13 ltem 10 + Item 12 Authorized Shares ltem 7 Multiply the share value obt Value of Authorized Shai Multiply the result obtained which is the license rate of the	Par Value Item 7 tained in B by the percentage of Percentage from . in C by .0005. This is the decide statute.	Value of Authorized Shares Obtained in A. A above A approxemal equivalent of 1/20th of 1%
A. B	ltem 11 + Item 13 ltem 10 + Item 12 Authorized Shares ltem 7 Multiply the share value obt Value of Authorized Shai Multiply the result obtained which is the license rate of the	Par Value Item 7 tained in B by the percentage of Percentage from . in C by .0005. This is the decide statute.	Value of Authorized Shares Obtained in A.
B C.	Let of Utah. The shares represented to the share value of the	Par Value Item 7 tained in B by the percentage of Fercentage from A Fercentage from A Fercentage from A Amount of Amount of Amount of	Value of Authorized Shares Obtained in A. A above umal equivalent of 1/20th of 1% (Minimum \$25.00)
A. B C.	ltem 11 + Item 13 ltem 10 + Item 12 Authorized Shares ltem 7 Multiply the share value obtained which is the license rate of the Result from C above Result from C above	Par Value Item 7 tained in B by the percentage of in C by .0005. This is the decite statute. (2.0005 =	Value of Authorized Shares Obtained in A. A above A approxemal equivalent of 1/20th of 1%

General Instructions: A filing fee of \$25.00 is required for each filing. This is in addition to any license fee as computed above.

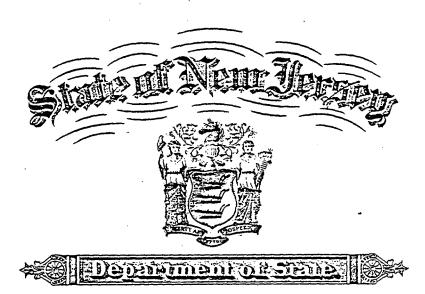
If these forms do not provide sufficient space for information pertinent to your company, please attach additional sheets of paper containing the information. Please feel free to contact the Secretary of State's office for any assistance which you or your lawyer may need in these matters.

CLYDE L. MILLER Secretary of State

RIDER

OFFICERS AND DIRECTORS

<u>HAMES</u>	TITLES	ADDRESSES
JOSEPH A. BARBERA	President & Director	100 West Tenth Street, Wilmington, Delaware 19801
FRANK J. OBARA, Jr.	Secretary & Director	100 West Tenth Street, Wilmington, Delaware 19801
HOWARD K. WEBB	Vice Pres., Treasurer & Director	100 West Tenth Street, Wilmington, Delaware 19801
GEORGE J. COYLE	Vice Pres. & Assit. Treas.	100 West Tenth Street, Wilmington, Delaware 19801
J. ROBERT BROADWAY	Ass't. Secy.	100 West Tenth Street, Wilmington, Delaware 19801
A. DAWA ATWELL	Ass't. Secy. & Ass't. Treas.	100 West Tenth Street, Wilmington, Delaware 19801



CERTIFICATE OF INCORPORATION

OF

ASARCO INCORPORATED

* * * * *

To: The Secretary of State State of New Jersey

THE UNDERSIGNED, of the age of eighteen years or over, for the purpose of forming a corporation pursuant to the provisions of Title 14A, Corporations, General, of the New Jersey Statutes, do hereby execute the following Certificate of Incorporation:

FIRST: The name of the corporation is ASARCO INCORPORATED

SECOND: The purpose or purposes for which the corporation is organized are:

To engage in any activity within the lawful business purposes for which corporations may be organized under the New Jersey Business Corporation Act.

To manufacture, purchase or otherwise acquire, invest in, own, mortgage, pledge, sell, assign and transfer or otherwise dispose of, trade, deal in and deal with goods, wares and merchandise and personal property of every class and description.

To acquire, and pay for in cash, stock or bonds of this corporation or otherwise, the good will, rights, assets and property, and to undertake or assume the whole or any part of the obligations or liabilities of any person, firm, association or corporation.

To acquire, hold, use, sell, assign, lease, grant licenses in respect of, mortgage or otherwise dispose of letters patent of the United States or any foreign country, patent rights, licenses and privileges, inventions, improvements and processes, copyrights, trade-marks and trade names, relating to or useful in connection with any business of this corporation.

To acquire by purchase, subscription or otherwise, and to receive, hold, own, guarantee, sell, assign, exchange, transfer, mortgage, pledge or otherwise dispose of or deal in and with any of the shares of the capital stock, or any voting trust certificates in respect of the shares of capital stock, scrip, warrants, rights, bonds, debentures, notes, trust receipts, and other securities, obligations, choses in action and evidences of indebtedness or interest issued or created by any corporations, joint stock companies, syndicates, associations, firms, trusts or persons, public or private, or by the government of the United States of America, or by any foreign government, or by any state, territory, province, municipality or other political subdivision or by any governmental agency, and as owner thereof to possess and exercise all the rights, powers and privileges

of ownership, including the right to execute consents and vote thereon, and to do any and all acts and things necessary or advisable for the preservation, protection, improvement and enhancement in value thereof.

To borrow or raise moneys for any of the purposes of the corporation and, from time to time without limit as to amount, to draw, make, accept, endorse, execute and issue promissory notes, drafts, bills of exchange, warrants, bonds, debentures and other negotiable or non-negotiable instruments and evidences of indebtedness, and to secure the payment of any thereof and of the interest thereon by mortgage upon or pledge, conveyance or assignment in trust of the whole or any part of the property of the corporation, whether at the time owned or thereafter acquired, and to sell, pledge or otherwise dispose of such bonds or other obligations of the corporation for its corporate purposes.

To purchase, receive, take by grant, gift, devise, bequest or otherwise, lease, or otherwise acquire, own, hold, improve, employ, use and otherwise deal in and with real or personal property, or any interest therein, wherever situated, and to sell, convey, lease, exchange, transfer or otherwise dispose of, or mortgage or pledge, all or any of the corporation's property and assets, or any interest therein, wherever situated.

In general, to carry on any other business in connection with the foregoing, and to have and exercise all the powers conferred by Title 14A, Corporations, General, Revised Statutes of New Jersey, and to do any or all of the things hereinbefore set forth to the same extent as natural persons might or could do, and in any part of the world.

The foregoing clauses shall be construed both as objects and powers and, except where otherwise expressed, such objects and powers shall be in nowise limited or restricted by reference to or inference from the terms of any other clause in this certificate of incorporation, but the objects and powers so specified shall be regarded as independent objects and powers, and it is hereby expressly provided that the foregoing enumeration of specific powers shall not be held to limit or restrict in any manner the powers of the corporation.

THIRD: The aggregate number of shares which the corporation shall have authority to issue is one thousand (1,000) shares with a par value of One Dollar (\$1.00) each.

POURTH: The address of the corporation's initial registered office is 15 Exchange Place, Jersey City,

New Jersey 07302, and the name of the corporation's initial registered agent at such address is The Corporation Trust

Company.

FIFTH: The number of directors constituting the initial board of directors shall be three (3); and the names and addresses of the directors are as follows:

NAMES

ADDRESSES

J. A. BARBERA

100 West Tenth Street Wilmington, Delaware 19801

F. J. OBARA, JR.

100 West Tenth Street Wilmington, Delaware 19801

H. K. WEEB

100 West Tenth Street Wilmington, Delaware 19801

SIXTH: The names and addresses of the incorporators are as follows:

NAMES

ADDRESSES

MARIS KRUZE

277 Park Avenue

New York, New York 10017

LUCY ESPOSITO

277 Park Avenue New York, New York 10017

IN WITNESS WHEREOF, we, the incorporators of the above named corporation, have hereunto signed this Certificate of Incorporation on the 14th day of January, 1975.

MARIS KRUZE

LUCY ESPOSITO

F. Joseph Carana Asst. Secretary of state



I, the Secretary of State of the State of New Jersey, and hereby Certify that the foregoing is a true color of Certificate of Change of Corporate Name of ASARCO INCORPORATED to AMERICAN SMELLING AND REFINING COMPANY

as the same is taken fro	m and co	ompared w	ith the orig	ginal filed
in my office on the			U	
<u>1975</u> , and now		•		
	set my		l affixed m	e hereunto y Official
		April		
		J. Edu	_	inel

and the endorsements thereon;

Secretary of State:

Filing Fee: \$25.00

APPLICATION FOR AMENDED CERTIFICATE OF AUTHORITY OF

File in Duplicate Originals

	ASA	RCO INCORE	PORATED	1975
		(corporate na	me)	. Oi
To The Secretary of of the State of Utah				SERVE SERVE
Pursuant to the pro- signed corporation b Utah, and for that po-	iereby applies for a	in Amended Ce	e Utah Business Corpora rtificate of Authority to nent:	ation Act. the under- transact business in
FIRST: A Certifical 19_75, authorizi	e of Authority was ng it to transact bus	issued to the co	orporation by your office tate.	on February 27
SECOND: The corp	orate name of the c	orporation has	been changed to	
A	MERICAN SMELT	TING AND R	EFINING COMPANY	•
THIRD: The corpor	ation will use the cl	hanged name he	reafter in Utah.	•
			nusiness in Utah other or icate of Authority, as fol	
Dated	May 1		, 19 <u>75</u> .	
		By 6	President porticorbination Joseph A. Bart Necretary TEXNORMALINE A.B. Atwell	Denhen Dera
Notes: 1, If the	corporate name ha	s not been chan	iged, insert "No Change"	
2. If no	other or additional	purposes are pr	oposed, insert "No Chan	ge``.
STATE OF	DELAWARE			
COUNTY OF	NEW CASTLE	ss		
			notary public, do hereby <u>May</u>	
sworn, declared that	hefore me <u>JOS</u> he is the	EPH A. BAF	RBERA who, bei	
			dent of the corpor	ration, and that the
statements therein c				•
Ma:	ÿ	, A.b. 19,	75_	day of
My Commission	expires	me 25, 1	1976	•
			Diday &	hatak)

Votary Public

32*03

CERTIFICATE OF AMENDMENT

TO THE

FILED & REGORDED

CERTIFICATE OF INCCAPORATION

APR 22 1975

OF

ASARCO INCORPORATED

F. Joseph Carragher Asst. Secretary of State

* * * * *

To: The Secretary of State State of New Jersey

Pursuant to the provisions of Section 14A:9-2(4) and Section 14A:9-4(3), Corporations, General, of the New Jersey Statutes, the undersigned corporation executes the following Certificate of Amendment to its Certificate of Incorporation:

- The name of the corporation is ASARCO INCORPORATED.
- 2. The following amendment to the Certificate of Incorporation was approved by the directors and thereafter duly adopted by the shareholders of the corporation on the 2nd day of April, 1975:

RESOLVED, that Article "FIRST" of the Certificate of Incorporation be amended to read as follows:

"FIRST: The name of the corporation is AMERICAN SMELTING AND REFINING COMPANY."

- 3. The number of shares entitled to vote upon the amendment was one thousand (1,000).
- 4. That in lieu of a meeting and vote of the shareholders and in accordance with the provisions of Section 14A:5-6, the amendment was adopted by the shareholders without a meeting pursuant to the written consents of the shareholders and the number of shares represented by such consents is one thousand (1,000) shares.
- 5. The effective date of this Amendment shall be April 23, 1975.

Dated: April 22, 1975

ASARCO INCORPORATED,

Joseph A. Barbera, President

DEPARTMENT OF BUSINESS REGULATION DIVISION OF CORPORATIONS AND COMMERCIAL CODE

CORPORATION ANNUAL REPORT

FEB 18 1363 6705-26 REV. 8/85 STATE OF UTAH

In compliance with Section 16-10-121 & 122, and Section 16-10-12 or 16-10-110, U.C.A., 1953, the following report and if applicable

"	1896 the statement of char		e and/or agent, is submitted	E PLEASE TYPE O	R PHINT CLEARLY!)
िना	EVACT CORDODATE NAME		02/03/1975 F		00400080
	EXACT CORPORATE NAME	C T CORPORAT			00.100000
	REGISTERED AGENT	170 SO MAIN			
	REGISTERED OFFICE		TY, UT 84101	•	
		Undi DAGE CI.	11, 01 04101		
2	IF NEW REGISTERED AGENT	AND/OR OFFIC	E. PLEASE COMPLI	ETE	
	New Registered Agent			1	
				(R	egistered agent's signature)
	New Registered Office		City		State UTAH Zip
		(Street Address)			
	(With the above change, the address of th	e registered office an	d the address of the busine	ss office of the re-	gistered agent are identical.)
3	INCORPORATED UNDER TH	E LAWS OF	Delaware		STATE OR COUNTR
	•	_			
4	IF INCORPORATED OUTSIDE IN THE STATE OR COUNTING			E ADDRESS (OF THE PRINCIPAL OFFICE
				State or	
-	1209 Orange Street	Ci	ty Wilmington	Country _	Delaware Zip 19801
can.	(Street Address)		. Mineral Fr	nloration	
<u>5</u>	TYPE OF BUSINESS CONDI	UCTED IN UTAH	TIE OFFICERS AN	UD DIRECTOR	C OF THE CORPORATION
O	NAMES AND RESPECTIVE	ADDRESSES UI	THE <u>OFFICERS</u> AI		CITY. STATE, ZIP
Presi		AVIAIE	JI NEE!		<u> </u>
	-President				
Secr	,	EE SCH	EDULE A	TTACHE	D D
Treas	surer	•			
Z	DIRECTORS: (UTAH LAW R	EQUIRES AT LE	EAST 3 DIRECTORS	<u>:</u> .}	•
			02055		OUTY CTATE TID
		NAME	SIREEI	ADDRESS	CITY, STATE, ZIP
	1 2 CPP	SCHED	пт. Б. Д.	TTACHE	מי
	2 SEE	3 C R E D	0 11 12	1 1 11 0 11 1	
8	AUTHORIZED SHARES (DO	NOT CHANGE	THE INFORMATION	LISTED.)	
123	Number of Shares	Itemized	Series, If Any	Par Value	Number of Shares
	Authorized	By Class	Within A Class	Of Shares	Without Par Value
2	1,000	COMMON		100.0000	
		•		.0000	
<u>9</u>	NUMBER OF SHARES ISSU	ED (MUST BE C	OMPLETED)		
	Number of Shares	Itemized	Series, If Any	Par Value	Number of Shares
	Issued	By Class	Within A Class	Of Shares	Without Par Value
ζ,	1,000	Common	·	100.00	•
π q =	STATED CAPITAL AS OF !	DATE OF THIS	REPORT (Number o	f Shares Issu	ed X Par Value)\$ 100,000
, <u>, , , , , , , , , , , , , , , , , , </u>	Under the penalties of parjury and as a				
	registered office and/or agent, has been				
;		3			
	BY AMALLEY	ZR.A. Krizne	er [2	Assistant S	Secretary
_ <u>-</u>	Authorized, C	fficer			Title or Position
ے	If Registered Agent and/or Registered Ochange must be authorized by a resolution	ffice has been changed	on this form,said	DATE _ Febru	uary 4 , 19 86

EE \$5.00 Make check payable to Annual Report Section 122, PURSUANT TO SECTION 16-10-121 AND U.C.A., CORPORATIONS MUST FILE THEIR ANNUAL REPORTS WITHIN THE AONTH OF THEIR ANNIVERSARY DATE. FAILURE TO DO SO WILL SESULT IN SUSPENSION OF THE CORPORATIONS CHARTER.

The President or Vice President must sign the report.)

Remittance to: Annual Report Division 160 EAST 300 SOUTH 2ND FLOOR

P.O.Box 45801

Salt Lake City, Utah 84145-08

(801)530-6012

Send Report &

OFFICERS	TITE	Address
G. G. Snow	President	1418 N. Pike Golden, © 80401
J. O. Hinds	Chairman	P.O. Box 45 Commerce Court West Toronto. Ontario M5L 1B6
J. W. Ivany	Secretary	P.O. Box 45 Commerce Court West Toronto; Ontario M5L 1B6
J. P. Congdon	Vice-President/ Assistant Secretary	12640 West Cedar Drive P.O. Box 15638 Lakewood, CO 80215
D. F. Alberts	Vice-President/ Treasurer	12640 West Cedar Drive P.O. Box 15638 Lakewood, Co 80215
J. F. Minogue	Assistant Secretary	30100 Chagrin Boulevard Suite 100 Cleveland, Ohio 44124
R. A. Krizner	Assistant Secretary	30100 Chagrin Boulevard Suite 100 Cleveland, Ohio 44124
DIRECTORS		
J. O. Hinds		Same as above
G. G. Snow		Same as above
J. W. Ivany		Same as above

DATE

03/01/27

00/00/00

MUMPHE

1,000

NUMBER

2-SCREEN 2: R-REMARKS: F-FORMARD: B-BACK

1,000

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CORPORATION INFORMATION

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064726 NORANDA EXPLORATION, INC.
STATUS: GOOD STANDING
                              DATE: 00/00/00 CODE: 0 TYPE: 73 PROFIT: P
FOREIGN CORP. NAME:
REG. AGENT: C T CORPORATION SYSTEM
                                                   INCORP - ACT - DATE: 02/03/1975
  136 SO MAIN STREET # 608 AGNT-CHG-DATE: 00/00/00 REINS-DATE:
                                                                    00/00/00
  SALT LAKE CITY, UT
                            PREV-RES-DATE: 00/00/00 INACTIVE-DATE:
                                                                   00/00/00
  94101
                            AGENT-ADDR:
                                          00/00/00 ANN-RPT-DATE:
                                                                  03/01/97
INTENT TO:
                                          00/00/00 PROF-RPT-DATE:
                                                                   00/00/00
                            RESIGN-DATE:
 PRESIDENT/DIRECTOR
                           CHAIRMAN/DIRECTOR
                                                     SECRETARY
                                                     J. A. BAYLIS
 J. HARVEY
                           J. O. HINDS
                           PO BX 45, COMMERCE CT WST
 PO BX 45, COMMERCE CT WST
                                                    PO BX 45, COMMERCE OT MST
                           TORONTO, ONTARIO M5L 136 TORONTO, ONTARIO "15L 136
 TORONTO, ONTARIO M5L 1B6
 00000 CFFR-RES: 00/00/00 00000 OFFR-RES: 00/00/00 00000 CFFR-RES: 00/00/00
 CORPORATION TYPE: F
                           CORPORATION KIND: 04 .
          REMARKS: N
                                 STATED CAPITAL:
                                                  100,000
ADDITIONAL SHARES: N
                                    AUTHORIZED
```

DATE

00/00/00

00/00/00

CLASS

COMMON

PAR VALUE

100.0000

.0000



Filing	Fee: \$25.00 File in Duplicate				
1	APPLICATION FOR CERTIFICATE OF AUTHORITY 64726				
£) ;	NORANDA EXPLORATION, INC.				
h	(exact corporate name)				
	A corporation of the state of Delaware incorporated August 20, 1973				
4	hereby applies for: Certificate of Authority (date)				
Series of the se	The period of duration is Perpetual				
Filas Ce	The address of the corporation in the state of incorporation is 100 West Tenth St. Wilmington, Delaware 19801				
4.	The registered agent in Utah and the street address of the registered office in Utah is C T CORPORATION SYSTEM 175 South Main Street, c/o C T Corporation System, Salt Lake City, Utah 84111.				
5.	List the business purposes which you intend to pursue in Utah:				
	Mineral exploration and mining				
5.	List the names and address of your directors and officers:				
	Director J. O. Hinds 57 Cluny Drive, Toronto, Ontario Canada				
	Director R.J.M. Miller 1348 Wendigo Trail, Mississauga, Ont., Canad	la			
	Director G. G. Snow P.O. Box 15638, Denver, Colorado 80215				
	President J. O. Hinds 57 Cluny Dr., Toronto, Ontario, Canada				
	Vice President R.J.M. Miller 1348 Wendigo Trail, Mississauga, Ont.				
	Secretary John W. Ivany 2565 Chalkwell Cres., Mississauga, Ont.				
	Treasurer D. A. Foster 46 Sutherland Drive, Toronto, Ontario				
	List the aggregate number of shares which you have authority to issue. Itemize by class or series if applicable.				
	Number of Shares Class Series Par Value				
	1,000 Common - \$100.				
	List the aggregate number of issued shares. Itemize by classes.				
	Number of Shares Class Series Par Value				
	1.000				
	1,000 Common - \$100.				
	Stated Capital: \$ 100,000. (see section 16-10-1 (j) for definition)				
	Give estimate of value of all assets corporation will own during next year. \$ 5,700,000.				
	Give estimate of value of all assets in Utah next year. \$ 100,000.				
	Give estimate of gross business you will transact next year everywhere. S 100,000.				
	Office confinence on grown organically on the management of the confinence of grown organically on the confinence of grown organically on the confinence of grown organically on the confinence of grown organically or anically or the confinence of grown organically organical				
	Give estimate of gross business you will transact next year in Utah. SO_				
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(over)

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Amendment If authorized shares are increased by amendment, additional fees may be due. Compute the fee according to the preceeding instructions. Subtract the amount of fee previously paid by the corporation. The difference is the license fee due at the time of filing the amendment.

General Instructions: A filing fee of \$25.00 is required for each filing. This is in addition to any license fee as computed above.

If these forms do not provide sufficient space for information pertinent to your company, please attach additional sheets of paper containing the information. Please feel frée to contact the Secretary of State's office for any assistance which you or your lawyer may need in these matters.

CLYDE L. MILLER Secretary of State CERTIFICATE OF CORRECTION FILED TO CORRECT
A CERTAIN ERROR IN THE CERTIFICATE OF
INCORPORATION OF NORANDA EXPLORATION, INC.
FILED IN THE OFFICE OF THE SECRETARY OF STATE
OF DELAWARE ON AUGUST 24, 1973, AND
RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS
FOR NEW CASTLE COUNTY, DELAWARE, ON AUGUST 24, 1973

Noranda Exploration, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware,

DOES HEREBY CERTIFY:

- 1. The name of the corporation is Noranda Exploration, Inc.
- 2. That a certificate of incorporation was filed by the Secretary of State of Delaware on August 24, 1973 and recorded in the office of the Recorder of Deeds of New Castle County on August 24, 1973 and that said certificate requires correction as permitted by subsection (F) of section 103 of The General Corporation Law of the State of Delaware.
- 3. The innaccuracy or defect of said certificate to be corrected is as follows: Section 4 of the certificate provides that the total number of shares of Common stock which the corporation shall have authority to issue is one hundred thousand (100,000) and the par value of each such share is One Dollar (\$1.00) amounting in an aggregate to One Hundred Thousand Dollars (\$100,000) whereas the number of authorized shares of Common stock should be 1,000 and the par value of each such share should be \$100.00.

4. Section 4 of the certificate of incorporation is corrected to read as follows: The total number of shares of Common stock which the corporation shall have authority to issue is one thousand (1,000) and the par value of each such share is One Hundred Dollars (\$100.00) amounting in the aggregate to One Hundred Thousand Dollars (\$100,000.00).

IN WITNESS WHEREOF, said Noranda Exploration, Inc. has caused this certificate to be signed by its ______ President, and attested by its ______ Secretary, as of the 31st day of August, 1973.

NORANDA EXPLORATION, INC.

By President

ATTEST:



State of DELAWARE

Office of SECRETARY OF STATE

I. Robert H. Reed, Secretary of State of the State of Delaware, do hereby certify, that the above and foregoing pages numbered from 1 to 9, both numbers inclusive, is a true and correct copy of Certificate of Incorporation of the "NORANDA EXPLORATION, INC.", as received and filed in this office the twenty-fourth day of August, A.D. 1973, et 3 o'clock P.M.

And I do hereby further certify that the above and foregoing pages numbers inclusive, is a true and correct copy of Certificate of Correction filed to correct a certain error in the Certificate of Incorporation of the "NORANDA EXPLORATION, INC.", filed in this office on August 24, 1973, as received and filed in this office the ninth day of November, A.D. 1973, at 9 o'clock A.M.

In Testimony	Whereof, I have	hereunto set my	hand
and official se	eal at Dover this	twenty-seventh	_day
of	January in	n the year of our	Lord
one thousa	nd nine hundred	and sevent	y-five.



Robert H. Reed

Secretary of State

Grover A. Biddle Assistant Secretary of State

FORM 122

CERTIFICATE OF INCORPORATION

OF

NORANDA EXPLORATION, INC.

* * * * *

- The name of the corporation is NORANDA EXPLORATION, INC.
- 2. The address of its registered office in the State of Delaware is No. 100 West Tenth Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.
- 3. The nature of the business or purposes to be conducted or promoted is:

To mine, produce, purchase, acquire, own, prepare for market, sell and otherwise dispose of minerals, metals, ores and any other useful or valuable substances, deposits or products.

To search, prospect and explore for minerals, metals, ores, coal, stone, petroleum, gas, timber and any other useful or valuable elements, substances or products; to acquire, own, develop and exploit rights, claims and interests in lands and the products thereof; to acquire, own, maintain, develop, improve, manage, work and operate mines, pit;, quarries, collieries, timberlands and properties of all kinds, and arm inticles, materials, machinery, equipment and property used therefor or in connection therewith.

To manufacture, separate, reduce, smelt, refine, concentrate, treat, convert, work and produce metals of all kinds; to manufacture, produce, acquire, own, prepare for market, sell, dispose of and deal in metals, alloys, metal products, ores, minerals, stone, coal, wood, petroleum, gases and the products or by-products thereof; and to establish, build, acquire, own, equip, maintain, improve, repair and operate mills, factories, furnaces, converters, smelters, shops, laboratories, offices, buildings, structures and works of all kinds suitable, necessary or convenient to any of the purposes of the corporation.

To manufacture, purchase or otherwise acquire, invest in, own, mortgage, pledge, sell, assign and transfer or otherwise dispose of, trade, deal in and deal with goods, wares and merchandise and personal property of every class and description.

To purchase or otherwise acquire, hold, own, mortgage, sell, convey or otherwise dispose of, real and personal
property of every class and description in any of the states,
districts, territories or colonies of the United States, and
in any and all foreign countries, subject to the laws of
such state, district, territory, colony or country.

To engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.

4. The total number of shares of Common stock which the corporation shall have authority to issue is one numbered thousand (100,000) and the par value of each of such shares is One Dollar (\$1.00) amounting in the aggregate to the Eudred Thousand Dollars (\$100.000.00).

Wilmington, Delaware 19801

5. The name and mailing address of each incorporator is as follows:

NAME MAILING ADDRESS S. E. Widdoes 100 West Tenth Street Wilmington, Delaware 19801 W. J. Reif 100 West Tenth Street Wilmington, Delaware 19801 R. F. Andrews 100 West Tenth Street

- 6. The corporation is to have perpetual existence.
- 7. In furtherance and not in limitation of the powers conferred by statute, the board of directors is expressly authorized:

To make, alter or repeal the by-laws of the corporation.

To authorize and cause to be executed mortgages and liens upon the real and personal property of the corporation.

To set apart out of any of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and to abolish any such reserve in the manner in which it was created.

By a majority of the whole board, to designate one or more committees, each committee to consist of one or more of the directors of the corporation. The board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified marker at any meeting of the committee. The by-laws may

provide that in the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the board of directors, or in the by-laws of the corporation, shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to amending the certificate of incorporation, adopting an agreement of merger or consolidation, recommending to the stockholders the sale, lease or exchange of all or substantially all of the corporation's property and assets, recommending to the stockholders a dissolution of the corporation or a revocation of a dissolution, or amending the by-laws of the corporation; and, unless the resolution or by-laws, expressly so provide, no such committee shall have the power or authority to declare a dividend or to authorize the issuance of stock.

When and as authorized by the stockholders in accordance with statute, to sell, lease or exchange all or substantially all of the property and assets of the corporation, including its good will and its corporate franchises, upon such terms and conditions and for such

consideration, which may consist in whole or in part of money or property including shares of stock in, and/or other securities of, any other corporation or corporations, as its board of directors shall deem expedient and for the best interests of the corporation.

- 8. Meetings of stockholders may be held within or without the State of Delaware, as the by-laws may provide. The books of the corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the board of directors or in the by-laws of the corporation. Elections of directors need not be by written ballot unless the by-laws of the corporation shall so provide.
- 9. The corporation reserves the right to amend, alter, change or repeal any provision contained in this certificate of incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.
- 10. (a) The corporation shall have power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that he is or was a director, officer, apployee or agent of the corporation as a director, officer, employee or agent of another corporation. Parenership, joint venture, trust or other enterprise, against

expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful.

(b) The corporation shall have power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or

matter as to which such person shall have been adjudged to be liable for negligence or misconduct in the performance of his duty to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

- (c) To the extent that a director, officer, employee or agent of the corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b), or in defense of any claim, issue or matter therein, he shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him in connection therewith.
- (d) Any indemnification under subsections (a) and (b) (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances because he has met the applicable standard of conduct set forth in subsections (a) and (b). Such determination shall be made (1) by the board of directors by a majority vote of a quorum consisting of directors who were not parties to such action, suit or proceeding, or (2) if such a quorum is not obtainable, or, even if obtainable a quorum of disinterested directors

so directs, by independent legal counsel in a written opinion or (3) by the stockholders.

- (e) Expenses incurred in defending a civil or criminal action, suit or proceeding may be paid by the corporation in advance of the final disposition of such action, suit or proceeding as authorized by the board of directors in the specific case upon receipt of an undertaking by or on behalf of the director, officer, employee or agent to repay such amount unless it shall ultimately be determined that he is entitled to be indemnified by the corporation as authorized in this section.
- shall not be deemed exclusive of any other rights to which those seeking indemnification may be entitled under any by-law, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.
- (g) The corporation shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him and incurred by him in any such capacity, or arising out of his

status as such, whether or not the corporation would have the power to indemnify him against such liability under the provisions of this section.

(h) For the purposes of this section, references to "the corporation" include all constituent corporations absorbed in a consolidation or merger as well as the resulting or surviving corporation so that any person who is or was a director, officer, employee or agent of such a constituent corporation or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise shall stand in the same position under the provisions of this section with respect to the resulting or surviving corporation as he would if he had served the resulting or surviving corporation in the same capacity.

WE, THE UNDERSIGNED, being each of the incorporators hereinbefore named, for the purpose of forming a corporation pursuant to the General Corporation Lew of the State of Delaware, do make this certificate, hereby declaring and certifying that this is our act and deed and the facts herein stated are true, and accordingly have hereunto set our hands this 24th day of August, 1973.

· · · · · · · · · · · · · · · · · · ·	S. E. Widdoes
g - Samuel S Samuel Samuel Samue	W. J. Reif
	R. F. Andrews

T EXACT CORPORATE NAME

REGISTERED AGENT

REGISTERED OFFICE

DEPARTMENT OF BUSINESS REGULATION DIVISION OF CORPORATIONS AND COMMERCIAL CODE

DEC, 0 3 1986

REV. 8 85 STATE OF UTAH

CORPORATION ANNUAL REPORT

84101

084267 INC: 11/07/1979 F

136 SO MAIN STREET # 608

NORANDA MINING INC. C T CORFORATION SYSTEM

SALT LAKE CITY, UT

00406096

P.O.Box 45801

(801)530-6012

Salt Lake City, Utah 84145-0801

In compliance with Section 15-10-121 & 122, and Section 16-10-12 or 16-10-110, U.C.A., 1953, the following report and if applicable the statement of change of registered office and/or agent, is submitted: (PLEASE TYPE OR PRINT CLEARLY!)

IF NEW REGISTERED AGENT AND/OR OFFICE, PLEASE COMPLETE New Registered Agent (Registered agent's signature) New Registered Office (Street Address) (With the above change, the address of the registered office and the address of the business office of the registered agent are identical.) INCORPORATED UNDER THE LAWS OF (STATE OR COUNTR 3 4 IF INCORPORATED OUTSIDE THE STATE OF UTAH, GIVE THE ADDRESS OF THE PRINCIPAL OFFICE IN THE STATE OR COUNTRY OF INCORPORATION. State or City Wilmington 1209 Orange Street Country Delaware (Street Address) Mining TYPE OF BUSINESS CONDUCTED IN UTAH NAMES AND RESPECTIVE ADDRESSES OF THE OFFICERS AND DIRECTORS OF THE CORPORATION. NAME STREET CITY, STATE. ZIP President SEE SCHEDULE ATTACHED Vice-President Secretary Treasurer DIRECTORS: (UTAH LAW REQUIRES AT LEAST 3 DIRECTORS.) 7 CITY, STATE, ZIP NAME STREET ADDRESS SEE 2 SCHEDULE ATTACHED 8 AUTHORIZED SHARES (DO NOT CHANGE THE INFORMATION LISTED.) Number of Shares Itemized Series, If Any Par Value Number of Shares Within A Class Of Shares Without Par Value Authorized By Class 100.0000 10 COMMON .0000 NUMBER OF SHARES ISSUED (MUST BE COMPLETED) Number of Shares Itemized Series, If Any Par Value Number of Shares Without Par Value Within A Class Of Shares Issued By Class 10 \$100.00 Common STATED CAPITAL AS OF DATE OF THIS REPORT (Number of Shares Issued X Par Value)S of perjury and as an authorized officer, I declare that this annual report and, if applicable, the statement of change of registered office and of agent has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete R.A. Krizner Assistant Secretary 77 Title or Position Authorized Offiger (If Ragistered Agent and/or Registered Office has been changed on this form, said November 7 , **19** 86 **IB** DATE change must be authorized by a resolution adopted by the Board of Directors, and Send Report & The President or Vice President must sign the report.) Remittance to: Annual Report Division 160 EAST 300 SOUTH 2ND FLOOR FEE \$5.00 Make check payable to Annual Report Section *PURSUANT TO SECTION 16-10-121 AND 122, CORPORATIONS MUST FILE THEIR ANNUAL REPORTS

WITHIN THE

MONTH OF THEIR ANNIVERSARY DATE. FAILURE TO DO SO WILL

RESULT IN SUSPENSION OF THE CORPORATIONS CHARTER.

NORANDA	MINITARY	777
	LITUTURA.	100

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and the same of th	NORANDA MINING INC.	80400097 CRAD
Name*	Title	Business Address
W. Allan	President & Chairman	1500 - 1066 West Hastings Street Vancouver, British Columbia V6E 3X1
B. H. Grose	Secretary	P. O. Box 45 Suite 4500, Commerce Court West Toronto, Ontario M5L 1B6
E. K. Cork	Treasurer	P. O. Box 45 Suite 4500, Commerce Court West Toronto, Ontario M5L 1B6
J. F. Minogue	Assistant Secretary	30100 Chagrin Boulevard Suite 100 Cleveland, OH 44124
R. A. Krizner	Assistant Secretary	30100 Chagrin Boulevard Suite 100 Cleveland, OH 44124
J. G. Onder	Assistant Secretary	30100 Chagrin Boulevard Suite 100 Cleveland, OH 44124
DIRECTORS		
W. Allan		1500-1066 West Hastings Street Vancouver, British Columbia V6E 3X1
J. A. Hall		P.O. Box 45 Commerce Court West Toronto, Ontario M5L 1B6
J. O. Hinds		P.O. Box 45 Commerce Court West Toronto, Ontario M5L 1B6

DELA

COPPORATION INFORMATION

034257

MORANDA MINING INC.

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STATUS: RENCUED
                                    DATE: 07/20/82
                                                                TYPE: 73 PROFIM: P
                                                      CODE: 0
FOREIGN CORP. NAME:
BEG. AGENT: C T CORPORATION SYSTEM
                                                           INCOPP - ACT - DATE: 11/07/1979
  136 SO MAIN STREET # 608
                                AGNT-CHG-DATE: 00/00/00 REINS-DATE:
                                                                              .00/00/00
                                PREV-RES-DATE: 00/00/00 IMACTIME-DATE:
  SALT LAKE CITY, UT
                                                                              20/20/20
  34101
                                                 00/00/00 AMM - RPT - DATE:
                                                                              11/10/27
                                AGENT-ADDE:
INTENT TO:
                                RESIGN-DATE:
                                                 00/00/00 PROF-RPT-DATE:
                                                                              00/00/00
                                                             w bir ∜2Ω3± s
PRESIDENT
                               SECRETARY
                                                             F. W. CORK
 J.C. HIMDS
                               B. H. GROSE
                                                             P.O. BOY N5, COMMERCE OT.
MEST, TOPOMTO, ONT. MEL 1D5
 P.O. BOX 45, COMMERCE CT.
                               Plo. Box 45, COMMERCE CT.
                               WEST, TORONTO, ONT. M5L 136
 WEST, TORONTO, ONT. M5L 1B6
                                                             00000 1558-PES: 00/00/00
 00000 OFFR-RES: 00/00/00
                               00000 OFFR-RES: 00/00/00
 CORPORATION TYPE: F
                               CORPORATION KIND: 04
           REMARKS: N
                                      STATED CAPITAL:
                                                                          ISSUED
ADDITIONAL SHARES: N
                                           AUTHORIZED
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 CLASS
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2-SCPREM 2; R-REMARKS; F-FORMARD; R-BACK

Filing Fee: \$25.00

71	ovember -79	le in Duplicate
(APPLIGATION FOR CERTIFICATE OF AUTHORITY	84267
Citic etc	(exact corporate name)	
L.	A corporation of the state of <u>Delaware</u> , incorporated September 7. hereby applies for a Certificate of Authority to transact business in the state of Utah.	, 19 <u>79</u>
2.	The Corporation period of duration is perpetual	
3.	The address of the corporation in the state of incorporation is 100 West Tenth Str. Wilmington, Delaws	reet re
4.	The registered agent in Utah and the street address of the registered office in Utah is: CTCORI 175 South Main Street, c/o CT Corporation System,	PORATION SYSTEM
	Salt Lake City, Utah 84111.	
5.	The business purposes to be pursued in Utah are: Mining and Mineral Exp	loration
	चर्ना अस्ति स्वास्ति । स्वासिक br>स्वासिक स्वासिक	
6.	The names and address of corporation directors and officers are: Director CONSENT TO USE OF NAME	
	Director	ſ
	Director SEEATTACHED	•
	President	<u> </u>
	Vice President	. o. sy
	Secretary	€ ₹
	Treasurer	38,
7.	The aggregate number of shares corporation has authority to issue. (Itemize by class or series if an	13 101 -7 PH
	Number of Shares Class Series Par Value	
	1,000 Common \$100.00	ा ल हू
8.	President Vice President Secretary Treasurer The aggregate number of shares corporation has authority to issue. (Itemize by class or series if an Number of Shares Class Series Par Value 1,000 Common \$100.00 The aggregate number of issued shares. (Itemize by classes.)	
	runtiber of Shares : Class Series Far Value	
	10 Common \$100.	
9.	Stated Capital: § 1,000. (see section 16-10-2 [j] for definition)	
10.	Estimate of value of all assets corporation will own during next year. \$ 10,000,000.	
ιι.	Estimate of value of all assets in Utah next year. \$ 5,000,000.	
12.	Estimate of gross business corporation will transact next year everywhere. \$3,000,000.	
13.	Estimate of gross business corporation will transact next year in Utah. \$ 3,000,000.	
14.	A copy of Articles of Incorporation and all amendments certified by the custodian thereof , of the state of incorporation are attached.	
15.	The corporation shall use as its name in Utah NORANDA MINING INC. (The corporation shall use its name as set forth under application title unless this name is not available.)	ilable for use.)

(over)

92*99 64781711695827198

Under penalties of perjury, I declare that this application for Certificate of Authority has been examined by me and is, to the best of my knowledge and belief, true, correct and complete.

By Prefdent of Fix President J.O. HINDS
By Secretary or XHNELS STAKE
J.W. IVANY

SUGGESTIONS

16. The law requires payment of a corporation license fee at the rate of 1/20th of 1% of the dollar value of the total authorized shares of the corporation. There is a minimum fee of \$25.00 and a maximum of \$500.00. Domestic corporations can compute the license fee by multiplying the dollar value of the authorized shares by .0005, the decimal equivalent of 1/20th of 1%. For purposes of fee computation, no par stock is valued at \$1.00 per share.

Foreign Corporations are assessed license fees only on the portion of the shares represented in the state of Utah. The shares represented in Utah are computed as follows:

	X.	=	
	Authorized Shares	Par Value	Value of Authorized
	Item 7	Item 7	Shares
_		X	=

Amendment—If authorized shares are increased by amendment, additional fees may be due. Compute the fee according to the preceeding instructions. Subtract the amount of fee previously paid by the corporation. The difference is the license fee due at the time of filling the amendment.

Result from Cabove

General Instructions: A filing fee of \$25.00 is required for each filing. This is in addition to any license fee as computed above.

If these forms do not provide sufficient space for information pertinent to your company, please attach additional sheets of paper containing the information. Please feel free to contact the Secretary of State's office for any assistance which you or your lawyer may need in these matters.

DAVID S. MONSON Lt. Governor/Secretary of State

Amount of Tax Due (Minimum \$25.00)

1979 NOV -7 AM 9: 29

CONSENT TO USE OF NAME

NORANDA EXPLO	RATION INC.
a corporation organized under the laws of the St	ate of
hereby consents to the qualification in the State	of Utah of NORANDA MINING INC.
which is an affiliate of NORANDA EXPLO	PRATION INC. , which is
qualified in Utah.	
•	
IN WITNESS WHEREOF, the said	NORANDA EXPLORATION INC. ,
has caused this consent to be executed by its	CHAIRMAN president and
attested under its corporate seal by its	secretary, this
29 th day of october	, 19 <u>.79</u> .
	NORANDA EXPLORATION INC.
Ву	
	J. O. HINDS
Attest. Secretary JOHN IVANY	
(SEAL)	



Office of SECRETARY OF STATE

J. Glenn C. Kenton Secretary of State of the State of Delaware, do hereby certify that the Certificate of Incorporation of the "NORANDA MINING INC.", was received and filed in this office the seventh day of September, A.D. 1979, at 3 o'clock P.M.

And I do hereby further certify that the aforesaid Corporation is duly incorporated under the laws of the State of Delaware and is in good standing and has a legal corporate existence so far as the records of this office show and is duly authorized to transact business.

In Testimony Whereof, I have	e hereunto set my hand
and official seal at Dover this _	seventeenth day
of September	4.4
one thousand nine hundred	

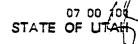


Glenn C. Kenton, Secretary of State

FORM 122

CORPORATION ANNUAL REPORT MUST BE FILED PRIOR TO MARCH 1ST C0400102

PAMOUR FORCUPINE MINES INC.





I EXACT CORPORATE NAME

In compliance with Section 16-10-121 & 122, and Section 16-10-12 or 16-10-110, U.C.A., 1953, the following report, and if applicable the statement of change of registered office and/or agent, is submitted: (PLEASE TYPE OR PRINT CLEARLY!)

083946

DATE OF INC. 10/15/1979

Remittance to: Annual Report Division P.O. Box 5801

Salt Lake City, Utah 84110

,/1

	REGISTERED AGENT	C T CORPORATI	ON SYSTE	em				
	REGISTERED OFFICE	175 SOUTH MAI						
	REGISTERED OFFICE	SALT LAKE CIT	Y, UTAH	84111				
	IF NEW DECICEEDS ACC	NT ANDIOS OFFICI			•			
	IF NEW REGISTERED AGE	NI AND/OR OFFICE	=, PLEAS	E COMPLE			11/27/55 3/07/65	
	New Registered Agent						· · · · · · · · · · · · · · · · · · ·	
	New Registered Office	·		City		State	e <u>UTAH</u>	Zıp
2	(With the above change, the address IF THE FOLLOWING INF AND SIGN. OTHERWIS: INCORPORATED UNDER	ORMATION IS THE E FILL IN ALL OF	SAME A	S LAST Y RMATION	EAR, PLEAS	E CHECK ELOW.	(X), LIST	TITLE, DA
4	IF INCORPORATED OUT IN THE STATE OR COU			GIVE THE	ADDRESS C)F THE F	PRINCIPAL	OFFICE
		•••			State or			
	(Street Address	Cit	Υ		Country _		Zip	
5	TYPE OF BUSINESS CO	NDUCTED IN UTAH						
ô	NAMES AND RESPECTI	VE ADDRESSES OF						
_		NAME	•	STREET	ADDRESS		CITY, STAT	E. ZIP
	sident	•						
	e-President retary							
	asurer							
	RECTORS: IF DIRECTORS A	RE SAME AS OFFI	CERS. PL	EASE CHE	CK (), OTHE	ERWISE	THEY MUS	T BE LIST
		UIRES AT LEAST		ORS.)				
		NAME		STREET	ADDRESS		CITY, STAT	E. ZIP
	1.							
	2. 3.							
[7]	AUTHORIZED SHARES (DO NOT CHANGE	THE INFO	RMATION	ISTED)			
<u></u>	Number of Shares	Itemized	Series, I		Par Value		Number of S	Shares
	Authorized	By Class	Within A	•	Of Shares	_	Without Par	Value
	1,000	COMMON		•	100.0000			
-					-0000			
8	NUMBER OF SHARES IS				Bar Mala			1
	Number of Shares Issued	ltemized Bv Class	Series, I Within A	•	Par Value Of Shares		Number of S Without Par	
	133060	DV Oless	741(1)(1)	01853	Or Shares	-	WILLIOUT 1 BI	<u> </u>
9	STATED CAPITAL AS C	F DATE OF THIS I	REPORT (Number of	Shares Issu	ed X Pa	r Value)\$	
_	Under the panalties of perjury and	as an authorized officer, I	declare that	this annual repo	ort and, if applicat	ole, the stat	ement of chang	e of
	registered office and/or agent, has	been examined by me and	is, to the be	st of my knowi	edge and belief, t	rue, correct,	and complete.	
- 	my A 1, 100 >	J F Minoque		557		Agent		
10	BY James & Minoria	ed`Officer		11 .			or Position	
				12	DATE Feb	oruary 2		, 19 83
	(If Registered Agent and/or Register	ed Office has been changed	on this form		DV (=			_ , \3
	change must be authorized by a rest the President or Vice-President mus	•	d of Director	s; and Send	Report &			

EE \$5.00 (If filed after March 1st, \$10.00)

Take check payable to: Annual Report Division

Filing Fee: \$25.00

	of the Lt. Goy Secth	<u> </u>			
01	tover A.D. 13 79				File in Duplicate
DA LL (OOV CONTRIBLE TOP	Z ation for	CERTIFICA	TE OF AUTHORITY	
ing Clerk	- /	ORCUPINE M			83946
		(exa	ct corporate na	me)	
i.,	A corporation of the stat - hereby applies for a Certi			incorporated Septemb isiness in the state of Utah.	er 7 , 19 <u>79</u>
2.	The Corporation period o	of duration is	perpetua	<u>. </u>	
3.	The address of the corpor	ration in the state of	of incorporatio	n is 100 West Tent	h Street elaware
1.	175 South Main Stree	et, c/o C T Corpora		egistered office in Utah is:	C T CORPORATION SYSTEM
	Sait Lake City, Utah	84111.			
5.	The business purposes to	be pursued in Utal	h are: Min	ing and Mineral	Exploration
6.	The names and address of Director D. E. (-			oronto, Ont. M5N
				, -	· .
	Director B.H., President D.E. (Vice President J.M.		Kingsmi - as abo	ll Rd., Toronto,	oronto, Ont. M5R 2 Ont. M8X 2N7
	Director B.H., President D.E.(Vice President J.M. Secretary)	Grose - 21 G. Schmitt	Kingsmi - as abo above	ll Rd., Toronto,	
7.	Director B.H., President D.E. (Vice President J.M. Secretary) Treasurer) The aggregate number of si Number of Shares	Grose - 21 G. Schmitt Slack - as Grose - as	Kingsmi - as above s above	ll Rd., Toronto,	Ont. M8X 2N7
7.	Director B.H., President D.E. (Vice President J.M. Secretary) Treasurer) B.H. The aggregate number of sinumber of Shares	Grose - 21 G. Schmitt Slack - as Grose - as hares corporation b Class Common	Kingsmi - as above s above has authority to Series	ll Rd., Toronto, ve pissue. (Itemize by class or s Par Value \$100.00	Ont. M8X 2N7
	Director B.H. President D.E.(Vice President J.M. Secretary) Treasurer) The aggregate number of si Number of Shares 1,000	Grose - 21 G. Schmitt Slack - as Grose - as hares corporation b Class Common	Kingsmi - as above s above has authority to Series	ll Rd., Toronto, ve pissue. (Itemize by class or s Par Value \$100.00	Ont. M8X 2N7
	Director B.H., President D.E.(Vice President J.M. Secretary) Treasurer) The aggregate number of shares 1,000 The aggregate number of	Grose - 21 G. Schmitt Slack - as Grose - as hares corporation b Class Common	Kingsmi - as above s above has authority to Series	11 Rd., Toronto, ve prissue. (Itemize by class or s Par Value \$100.00	Ont. M8X 2N7
	Director B.H., President D.E. (Vice President J.M. Secretary) Treasurer) The aggregate number of s Number of Shares 1,000 The aggregate number of Number of Shares	Grose - 21 G. Schmitt Slack - as Grose - as hares corporation b Class Common issued shares. (Iten Class Common	Kingsmi - as above s above has authority to Series nize by classes. Series	ll Rd., Toronto, ve pissue. (Itemize by class or s Par Value \$100.00 Par Value \$100.	Ont. M8X 2N7
8.	Director B.H., President D.E. (Vice President J.M. Secretary) Treasurer) The aggregate number of shares 1,000 The aggregate number of Number of Shares 10 Stated Capital: \$1.00	Grose - 21 G. Schmitt Slack - as Grose - as hares corporation b Class Common issued shares. (Item Class Common	Kingsmi - as above s above has authority to Series nize by classes. Series section 16-10-	ll Rd., Toronto, ve pissue. (Itemize by class or s Par Value \$100.00 Par Value \$100.	Ont. M8X 2N7
9.	Director B.H., President D.E. (Vice President J.M. Secretary) Treasurer) The aggregate number of shares 1,000 The aggregate number of Number of Shares 10 Stated Capital: \$1.00	Grose - 21 G. Schmitt Slack - as Grose - as Grose - as hares corporation in Class Common issued shares. (Item Class Common OO. (see	Kingsmi - as above s above s above has authority to Series nize by classes. Series section 16-10- ill own during	ll Rd., Toronto, ve b issue. (Itemize by class or s Par Value \$100.00 Par Value \$100. 2 [j] for definition) mext year. \$5,000.0	Ont. M8X 2N7
9. 10.	Director B.H., President D.E. (Vice President J.M. Secretary) Treasurer) The aggregate number of shares 1,000 The aggregate number of Number of Shares 10 Stated Capital: \$1.00 Estimate of value of all as	Grose - 21 G. Schmitt Slack - as Grose - as Grose - as hares corporation h Class Common issued shares. (Iten Class Common OO. (see	Kingsmi - as above s above s above has authority to Series section 16-10- ill own during car. \$5,000	11 Rd., Toronto, ve prissue. (Itemize by class or servalue \$100.00 Par Value \$100. 2 [j] for definition) next year. \$5.000.00 2.000.	Ont. M8X 2N7 eries if applicable.)
9. 10. 11.	Director B.H., President D.E.O Vice President J.M. Secretary) B.H. Treasurer) The aggregate number of shares 1,000 The aggregate number of Number of Shares 10 Stated Capital: \$1.00 Estimate of value of all as Estimate of gross business	Grose - 21 G. Schmitt Slack - as Grose - as Grose - as hares corporation b Class Common issued shares. (Iten Class Common OO. (see	Kingsmi - as above s above s above has authority to Series nize by classes. Series section 16-10- ill own during tear. \$5.00	11 Rd., Toronto, ve prissue. (Itemize by class or servalue \$100.00 Par Value \$100. 2 [j] for definition) next year. \$5.000.00 2.000.	Ont. M8X 2N7 eries if applicable.)
9. 10. 11.	Director B.H., President D.E. (Vice President J.M. Secretary) Treasurer) The aggregate number of shares 1,000 The aggregate number of Shares 10 Stated Capital: \$1.00 Estimate of value of all as Estimate of gross business Estimate of gross business	Grose - 21 G. Schmitt Slack - as Grose - as Grose - as class Common issued shares. (Iten Class Common OO. (see seets corporation will to see corporation will to	Kingsmi - as above s above s above has authority to Series nize by classes. Series section 16-10- ill own during car. \$5.00 ransact next ye	11 Rd., Toronto, ve prissue. (Itemize by class or s Par Value \$100.00 Par Value \$100. 2 [j] for definition) mext year. \$ 5.000.0 0.000. ar everywhere. \$3,000	Ont. M8X 2N7 eries if applicable.) 00. ,000.

	declare that this application for Certificate of Authority has been examined by me
ind is, to the best of my knowledge and	d belief, true, correct and complete.
	By Malela D.E.G. SCHMIT
:	By Secretary or Assamus B.H. GROSE

SUGGESTIONS

16. The law requires payment of a corporation license fee at the rate of 1/20th of 1% of the dollar value of the total authorized shares of the corporation. There is a minimum fee of \$25.00 and a maximum of \$500.00. Domestic corporations can compute the license fee by multiplying the dollar value of the authorized shares by .0005, the decimal equivalent of 1/20th of 1%. For purposes of fee computation, no par stock is valued at \$1.00 per share.

Foreign Corporations are assessed license fees only on the portion of the shares represented in the state of Utah. The shares represented in Utah are computed as follows:

	·= .	
Authorized Shares	Par Value	Value of Authorized
Item 7-	Item 7	Shares
Multiply the share value obtain	ed in B by the percentage obtained	d in A.
	x	· =
Multiply the share value obtain Value of Authorized Shar	x	· =
Value of Authorized Shar	es Percentage from A abo	· =

Amendment—If authorized shares are increased by amendment, additional fees may be due. Compute the fee according to the preceeding instructions. Subtract the amount of fee previously paid by the corporation. The difference is the license fee due at the time of filing the amendment.

Result from Cabove

General Instructions: A filing fee of \$25.00 is required for each filing. This is in addition to any license fee as computed above.

If these forms do not provide sufficient space for information pertinent to your company, please attach additional sheets of paper containing the information. Please feel free to contact the Secretary of State's office for any assistance which you or your lawyer may need in these matters.

DAVID S. MONSON Lt. Governor/Secretary of State

Amount of Tax Due (Minimum \$25.00)

COUNTY OF York ss.
I, Bruce Harrison, Grose , a notary public, do hereby
certify that on this08thday of
personally appeared before me :William O'Henly, who,
being by me first duly sworn, declared that he is the Secretary
of Pamour Porcupine Mines Inc.
that he signed the foregoing document asSecretary of the corporation, and
that the statements therein contained are true.
In witness whereof, I have hereunto set my hand and seal this Oathay of September
A.D. 1983
My commission expiresfor_lifeNotate DUBLEC

(UTAH - 1500 - 10/10/72)

In Re:	
Dissolution of Petition for of Withdrawal X Pamour Porcupine Mines Inc. #083946	NoCERTIFICATE OF TAX COMMISSION
A Utah Foreign Corporation Incorporated or qualified in the State of Utah	•
This is to certify that all fees, taxes, penalties, interest and	d costs due the state and imposed upon:
Pamour Porcupine Mines, c/o Noranda Aluminum, In 30100 Chagrin Boulevard Cleveland, Ohio 44124 a corporation incorporated qualified X under the laws of the Sta	#100
This tax clearance certificate expires onJune	19_84
in accordance with the provision checked below: If this certificate is not used in a legal proceeding for the corporation within ninety days of date issued, as shown. If the above named corporation is not dissolved or with	n below, it will become invalid.
19, the corporation will become liable for the filing the period then ended, and for the payment of the tax of	ng of a Utah corporation franchise tax return fo
DATED this 21st day of March 19 84	
By Charles Arnold	OF UTAH

Title:

C T CORPORATION SYSTEM

Associated with The Corporation Trust Rampany UNION COMMERCE BUILDING, CLEVELAND, OHIO 44115 • (216) 6216270

DATE:

September 22, 1983

Lieutenant Governor Corporation Division Attn: Margaret Cowan P. O. Box 5801 Salt Lake City, Utah 84110

RE:

PAMOUR PORCUPINE MINES INC. (Delaware Domestic)

(Utah Withdrawal)

COUNSEL:

Thompson, Hine & Flory Attn: Barry Fisher

National City Bank Building

Cleveland, Ohio 44115

Gentlemen:

Purusant to the instructions of counsel we enclose for filing on behalf of the subject corporation the required documents to effect withdrawal from your state. Our check to cover the required fee is attached.

Upon filing, please forward your usual evidence to this office.

Yours very truly,

C T CORPORATION SYSTEM

Michael P. Nakon Assistant Secretary

MPN/av Encls. ds



Office of SECRETARY OF STATE

I, Glenn C. Kenton Secretary of State of the State of Delaware, do hereby certify that the above and foregoing is a true and correct copy of Certificate of Incorporation of the "PAMOUR PORCUPINE MINES INC.", as received and filed in this office the seventh day of September, A.D. 1979, at 3 o'clock P.M.

In 'I	estimony	Whereof, I have	hereunto set my	hand
and	l official sec	al at Dover this _	eighteenth	_day
		September		
	one thous	and nine hundred	and seventy-nine.	



FORM 12

Glenn C. Kenton, Secretary of State

#F(POSTS

THE OWN TO ME TO I

CERTIFICATE OF INCORPORATION

OF

PAMOUR PORCUPINE MINES INC.

* * * * *

- The name of the corporation is -PAMOUR PORCUPINE MINES INC.
- 2. The address of its registered office in the State of Delaware is No. 100 West Tenth Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.
- 3. The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.
- 4. The total number of shares of stock which the corporation shall have authority to issue is one thousand (1,000) and the par value of each of such shares is One Hundred Dollars (\$100.00), amounting in the aggregate to One Hundred Thousand Dollars (\$100,000.00).

,

5. The name and mailing address of each incorporator is as follows:

NAME

MAILING ADDRESS

K. L. Husfelt

100 West Tenth Street, Wilmington, Delaware 19801

M. A. Ferrucci

100 West Tenth Street, Wilmington, Delaware 19801

E. L. Kinsler

100 West Tenth Street, Wilmington, Delaware 19801

- The corporation is to have perpetual existence.
- 7. In furtherance and not in limitation of the powers conferred by statute, the board of directors is expressly authorized to make, alter or repeal the by-laws of the corporation.
- 8. Elections of directors need not be by written ballot unless the by-laws of the corporation shall so provide.

Meetings of stockholders may be held within or without the State of Delaware, as the by-laws may provide. The books of the corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the board of directors or in the by-laws of the corporation.

9. The corporation reserves the right to amend, alter, change or repeal any provision contained in this certificate of incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.

WE, THE UNDERSIGNED, being each of the incorporators hereinbefore named, for the purpose of forming a corporation pursuant to the General Corporation Law of the State of Delaware, do make this certificate, hereby declaring and certifying that this is our act and deed and the facts herein stated are true, and accordingly have hereunto set our hands this 23rd day of August, 1979.

 K. L. Husfelt
K. L. Husfelt
 M. A. Ferrucci
M. A. Ferrucci
 E. L. Kinsler
E. I. Kinsler



DEPARTMENT OF BUSINESS REGULATION DIVISION OF CORPORATIONS AND COMMERCIAL CODE

REV. 8/85 1986° UTAH

CORPORATION ANNUAL REPORT

In compliance with Section 16-10-121 & 122, and Section 16-10-12 or 16-10-110, U.C.A., 1953, the following report

	the statement	nt of change of registered offic	ce and/or agent, is submitte	d: (PLEASE TYPE OR I	PRINT CLEARLY!)
F	EXACT CORPORATE N REGISTERED AGENT REGISTERED OFFICE		OT /TD		00400111
<u>2</u> 1	F NEW REGISTERED	AGENT AND/OR OFFIC	CE, PLEASE COMPL	ETE	NECE
	New Registered Agent			/	
	New Registered Office	(Street Address)	City	inegi	State: UTAH (ZID
(1	With the above change, the add	ress of the registered office ar	nd the address of the busin	ess office of the regis	tered agent are identical.)
3	INCORPORATED UNI	DER THE LAWS OF_	UTAH.		(STATE OR COUNTR
4		OUTSIDE THE STATE COUNTRY OF INCORPO			THE PRINCIPAL OFFICE
		C	ity	State or Country	Zip
Secre	NAMES AND RESPE	CONDUCTED IN UTA CTIVE ADDRESSES O NAME DNES PORS 3A0444 1 120 8 ENTLEY 332	OF THE <u>OFFICERS</u> A <u>STREE</u> EX 39 IN 79 PINE ST. 4 ^{EA} FL. SEX 39	PARU PARU SAN FRIAN PARU	OF THE CORPORATION. CITY, STATE: ZIP CITY, MTAH 84060 CITY, MT 84060 CISCO, CA 94104 CITY, MT 84060
		NAME	STREE	T ADDRESS	CITY, STATE, ZIP
18].	1 NICK BADANAI 2 WILLIAM BENTLE 3 BARBHRA BENTLE AUTHORIZED SHARE	EY EY ES (DO NOT CHANGE	190 POX AAA. 372 PINE ST. 372 PINE ST.	4th Fl H th Fl	TAHOE CITY, CA 95730 SAN FRANCISCO, CA 94104 SAN FRANCISCO, CA 94104
	Number of Share Authorized 4,000,000		Series, If Any Within A Class	Par Value Of Shares .0000	Number of Shares Without Par Value
ر قا	*	S ISSUED (MUST BE	COMPLETED)	0000	
() ()	Number of Share	s Itemized By Class	Series, If Any Within A Class	Par Value Of Shares	Number of Shares Without Par Value
10 TO 1	Under the penalties of perjury	AS OF DATE OF THIS y and as an authorized officer, t, has been examined by me an	I declare that this annual re	of Shares Issued	
 	(If Registered Agent and/or Reg	norized Officer gistered Office has been change a resolution adopted by the Book must sign the report.)	and of Directors and	DATE 4/1/ nd Report &	Title or Position / 19 5/3

FEE \$5.00 Make check payable to Annual Report Section *PURSUANT TO SECTION 16-10-121 AND 122, U.C.A., CORPORATIONS MUST FILE THEIR ANNUAL REPORTS WITHIN THE MONTH OF THEIR ANNIVERSARY DATE. FAILURE TO DO SO WILL
RESULT IN SUSPENSION OF THE CORPORATIONS CHARTER.

DO NOT CHANGE OR ALTER THIS FORM

Remittance to: Annual Report Division 160 EAST 300 SOUTH 2ND FLOOR

> P.O.Box 45801 Salt Lake City, Utah 84145-080 :-

(801)530-6012

HATU

CORPORATION INFORMATION

GREATER PARK CITY COMPANY

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STATUS: GOOD STANDING
                                  DATE: 00/00/00
                                                   CODE: 0
                                                             TYPE: 66
                                                                       PROFIT: P
FOREIGN CORP. NAME:
REG. AGENT: CRAIG JOHNSON /T
                                                        INCORP - ACT - DATE: 05/04/1070
  P 0 BOX 39
                              AGNT-CHG-DATE: 02/19/32 REINS-DATE:
                                                                          00/00/00
  PARK CITY, UTAH
                              PREV-RES-DATE: 00/00/00 INACTIVE-DATE:
                                                                          00/00/00
  34060
                                                                          04/15/37
                              AGENT-ADDR:
                                              00/00/00 AMM-RPT-DATE:
INTENT TO:
                              RESIGN-DATE:
                                              00/00/00 PROF-RPT-DATE:
                                                                          00/00/00
 PRESIDENT
                             VICE PRESIDENT
                                                          SECRETARY
                                                          WILLIAM DENTLEY
 PHIL JONES
                             CRAIG BADAMI
                                                          332 PIME STREET 4TH FL
 P.O. BOX 39
                             P.O. BOX 39
                             PARK CITY, UTAH
 PARK CITY, UTAH
                                                          SAN FRANSCICO, CALIF
                                                          94194 OFFR-BFS: 00/00/00
 94060 OFFR-PES: 00/00/00
                             94060 CFFR-RES: 00/00/00
 CORPORATION TYPE: D
                             CORPORATION KIND:
          REMARKS: N
                                    STATED CAPITAL:
ADDITIONAL SHARES: N
                                         AUTHORIZED
                                                               DATE
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 CLASS
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2-SCREEM 2; R-REMARKS; F-FORWARD; D-PACK

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ARTICLES OF INCORPORATION

OF

TREASURE MOUNTAIN RESORT COMPANY

The undersigned natural persons of the age of twenty-one (21) years or more, acting as incorporators of a corporation (the "Corporation") under the provisions of the applicable laws of the State of Utah, adopt the following Articlés of Incorporation:

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Article 1. Name

The name of the corporation is TREASURE MOUNTAIN RESORT COMPANY.

Article 2. Period of Duration

The period of duration of the Corporation is perpetual.

Purposes and Powers Article 3.

The purposes for which this Corporation is formed, the specific business in which the corporation is primarily to engage being set forth in Paragraph (1) below, are:

- The specific business in which the corporation is primarily to engage is the development of a major skioriented recreational facility and the development, sale, lease, and operation of real and personal property in connection therewith.
- To manufacture, buy, sell, assemble, distribute, and otherwise acquire, or to own, hold, use, sell, assign, transfer, exchange, lease, license or otherwise dispose of, and to invest, trade, or deal in goods, wares, merchandise, building materials, supplies and all other property of every class and description.

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- (3) To purchase, acquire, own, hold, use, lease, either as lessor or lessee, rent, sublet, grant, sell, exchange, subdivide, mortgage, deed in trust, manage, improve, cultivate, develop, maintain, construct, operate, and generally deal in, any and all real estate, improved or unimproved, stores, office buildings, dwelling houses, boarding houses, apartment houses, hotels, motels, condominiums, business blocks, garages, warehouses, manufacturing plants, and other buildings of any kind or description, and any and all other property of every kind or description, real, personal and mixed, and any interest or right therein, including water and water rights, wheresoever situated, either in Utah, other states of the United States, the District of Columbia, territories and colonies of the United States and foreign countries.
- (4) To purchase, acquire, take, hold, own, use and enjoy, and to sell, lease, transfer, pledge, mortgage, convey, grant, assign or otherwise dispose of, and generally to invest, trade, deal in and with oil royalties, mineral rights of all kinds, mineral bearing lands and hydrocarbon products of all kinds, oil, gas and mineral leases, and all rights and interests therein, and in general products of the earth and deposits, both subsoil and surface, of every nature and description.
- (5) To enter into, make, perform and carry out contracts of every kind for any lawful purpose without limit as to amount, with any person, firm, association or corporation, municipality, county, parish, state, territory, government (foreign or domestic) or other municipal or governmental subdivision.
- (6) To become a partner (either general or limited or both) and to enter into agreements of partnership with one or more other persons or corporations, for the purpose of carrying on any business whatsoever which this corporation may deem proper or convenient in connection with any of the purposes herein set forth or otherwise, or which may be calculated, directly or indirectly, to promote the interest of this corporation or to enhance the value of its property or business.
- (7) To acquire, by purchase or otherwise, the good will, business, property rights, franchises and assets of every kind, with or without undertaking, either wholly or in part, the liabbilities of any person, firm, association or corporation; and to acquire any property or business as a going concern or otherwise,

- (a) by purchase of the assets thereof wholly or in part, (b) by acquisition of the shares or any part thereof, or (c) in any other manner; and to pay for the same in cash or in the shares or bonds or other evidences of indebtedness of this corporation, or otherwise; to hold, maintain and operate, or in any manner dispose of the whole or any part of the good will, business, rights and property so acquired, and to conduct, in any lawful manner, the whole or any part of any business so acquired; and to exercise all the powers necessary or convenient in and about the management of such business.
- (8) To take, purchase and otherwise acquire, own, hold, use, sell, assign, transfer, exchange, lease, mortgage, convey in trust, pledge, hypothecate, grant licenses in respect of and otherwise dispose of letters patent of the United States or any foreign country, patent rights, licenses and privileges, inventions, improvements and processes, copyrights, trade-marks and trade names, and government, state, territorial, county and municipal grants and concessions of every character which this corporation may deem advantageous in the prosecution of its business or in the maintenance, operation, development or extension of its properties.
- (9) From time to time to apply for, purchase, acquire by assignment, transfer or otherwise, exercise, carry out and enjoy any benefit, right, privilege, prerogative or power conferred by, acquired under or granted by any statute, ordinance, order, license, power, authority, franchise, commission, right or privilege which any government or authority or governmental agency or corporation or other public body may be empowered to enact, make or grant; to pay for, aid in, and contribute toward carrying the same into effect; and to appropriate any of this corporation's shares, bonds and/or assets to defray the costs, charges and expenses thereof.
- (10) To subscribe or cause to be subscribed for, and to take, purchase and otherwise acquire, own, hold, use, sell, assign, transfer, exchange, distribute and otherwise dispose of, the whole or any part of the shares of the capital stock, bonds, coupons, mortgages, deeds of trust, debentures, securities, obligations, evidences of indebtedness, notes, good will, rights, assets and property of any and every kind, or any part thereof, of any other corporation or corporations, association or associations, firm or firms, or person or persons, together with the shares, rights,

units or interests in or in respect of any trust estate, now or hereafter existing, and whether created by the laws of the State of Utah or of any other state, territory or country; and to operate, manage and control such properties, or any of them, either in the name of such other corporation or corporations or in the name of this corporation, and, while the owner of any of said shares of capital stock, to exercise all of the rights, powers and privileges of ownership of every kind and description, including the right to vote thereon, with power to designate some person or persons for that purpose from time to time, and to the same extent as natural persons might or could do.

- (11) To promote or to aid in any manner, financially or otherwise, any person, firm, corporation or association of which any shares of stock, bonds, notes, debentures or other securities or evidences of indebtedness are held directly or indirectly by this corporation; and for this purpose to guarantee the contracts, dividends, shares, bonds, debentures, notes and other obligations of such other persons, firms, corporations or associations; and to do any other acts or things designed to protect, preserve, improve or enhance the value of such shares, bonds, notes, debentures or other securities or evidences of indebtedness.
- (12) To borrow and lend money, but nothing herein contained shall be construed as authorizing the business of banking, or as including the business purposes of a commercial bank, savings bank or trust company.
- (13) To issue bonds, notes, debentures or other obligations of this corporation from time to time for any of the objects or purposes of this corporation, and to secure the same by mortgage, deed of trust, pledge or otherwise, or to issue the same unsecured; to purchase or otherwise acquire its own bonds, debentures, or other evidences of its indebtedness or obligations; to purchase, hold, sell, and transfer the shares of its own capital stock to the extent and in the manner provided by the laws of the State of Utah as the same are now in force or may be hereafter amended.
- (14) To conduct and carry on, directly or indirectly, research, development and promotional or experimental activities, and to promote or aid financially or otherwise, any person, firm or corporation engaged in such activities, or any of them.
 - (15) To carry on any business whatsoever, either as

principal, agent or partner, which this corporation may deem proper or convenient in connection with any of the foregoing purposes or otherwise, or which may be calculated directly or indirectly to promote the interests of this corporation or to enhance the value of its property or business; and to conduct its business in this state, in other states, in the District of Columbia, in the territories and colonies of the United States, and in foreign countries.

(16) To have and to exercise all the powers conferred by the laws of Utah upon corporations formed under the laws pursuant to and under which this corporation is formed, as such laws are now in effect or may at any time hereafter be amended.

The foregoing statement of purposes shall be construed as a statement of both purposes and powers, and the purposes and powers stated in
each clause shall, except where otherwise expressed, be in nowise limited
or restricted by any reference to or inference from the term or provisions
of any other clause, but shall be regarded as independent purposes and
powers.

Article 4. Initial Registered Office And Name of Agent

The address of the initial registered office of the Corporation is 141 East First South, Salt Lake City, Salt Lake County, State of Utah 84111.

The name of the initial registered agent of the Corporation, an individual resident in Utah whose business address is at the above address, is M. Scott Woodland.

Article 5. Authorized Shares

This Corporation is authorized to issue two classes of shares of stock,

to be designated, respectively, "Preferred" and "Common". The total number of shares that the Corporation is authorized to issue is 10,000,000 shares. The aggregate par value for all shares that are to have a par value is \$6,040,000.00. The number of Preferred shares that are to have a par value is 6,000,000 shares. The par value of each Preferred share is \$1.00 per share, or an aggregate of \$6,000,000.00 par value for 6,000,000 Preferred shares. The number of Common shares that are to have a par value is 4,000,000 shares. The par value of each Common share is \$01 per share, or an aggregate of \$40,000.00 par value for 4,000,000 Common shares.

Article 6. Preferences, Privileges, And Restrictions Upon Shares

The preferences, privileges and restrictions granted to or imposed on the respective classes of shares or the holders thereof are as follows:

- (a) The holders of the outstanding Preferred shares shall be entitled to receive, out of any funds legally available therefor, dividends at the rate of seven per cent (7%) per annum of the par value thereof, and no more, payable in cash quarterly on the fifteenth day of March, June, September, and December in each year when and as declared by the board of directors of the Corporation. Such dividends shall accrue on each such share from the date of its original issuance and shall accrue from day to day, whether or not earned or declared. Such dividends shall be cumulative so that if such dividends in respect of any previous quarterly dividend period and for the current quarterly dividend period at the rate of seven per cent (7%) per annum shall not have been paid on or declared and set apart for all Preferred shares at the time outstanding, the deficiency shall be fully paid on or declared and set apart for such shares before any dividend or other distribution shall be paid on or declared or set apart for the Common shares.
- (b) In the event of a voluntary or involuntary liquidation, dissolution or winding up of this corporation, the holders of

Preferred shares shall be entitled to receive out of the assets of this Corporation, whether such assets are capital or surplus of any nature, and after complete payment and retirement of all the Series A Debentures referred to in Paragraph (d) (7) of this Article 6, an amount equal to the par value of such Preferred shares, and, in addition to such amount, a further amount equal to the dividends unpaid and accumulated thereon, as provided in (a) of this Article 6, to the date that payment is made available to the holders of Preferred shares, whether earned or declared or not, and no more, before any payment shall be made or any assets distributed to the holders of Common shares.

If upon such liquidation, dissolution or winding up, whether voluntary or involuntary, the assets thus distributed among the holders of the Preferred shares shall be insufficient to permit the payment to such shareholders of the full preferential amounts aforesaid, then the entire assets of this Corporation to be distributed shall be distributed ratably among the holders of Preferred shares.

In the event of any liquidation, dissolution or winding up of this Corporation, whether voluntary or involuntary, subject to all of the preferential rights of the holders of Preferred shares on distribution or otherwise, the holders of Common shares shall be entitled to receive, ratably, all remaining assets of this Corporation.

A consolidation or merger of this Corporation with or into any other corporation or corporations, or a sale of all or substantially all of the assets of the Corporation, shall not be deemed to be a liquidation, dissolution or winding up, within the meaning of this paragraph.

(c) This Corporation, at the option of the board of directors, may at any time after complete payment and retirement of all the Series A Debentures referred to in Paragraph (d) (7) of this Article 6, or from time to time thereafter, redeem the whole or any part of the outstanding Preferred shares by paying in cash therefor One Dollar (\$1.00) per share and, in addition to the aforementioned amount, an amount in cash equal to all dividends on Preferred shares unpaid and accumulated as provided in (a) of this Article 6, whether earned or declared or not, to and including the date fixed for redemption. In the case of redemption of a part only of the outstanding Preferred shares, this Corporation shall

designate by lot, in such manner as the board of directors may determine, the shares to be redeemed, or shall effect such redemption pro rata. Less than all of the Preferred shares at any time outstanding may not be redeemed until all dividends accrued and in arrears upon all Preferred shares outstanding shall have been paid for all past dividend periods, and until full dividends for the then current dividend period on all Preferred shares then outstanding, other than the shares to be redeemed, shall have been paid or declared and the full amount thereof set apart for payment. At least thirty (30) days' previous notice by mail, postage prepaid, shall be given to the holders of record of the Preferred shares to be redeemed, such notice to be addressed to each such shareholder at his post office address as shown by the records of this Corporation. On or after the date fixed for redemption and stated in such notice, each holder of Preferred shares called for redemption shall surrender his certificate evidencing such shares to this Corporation at the place designated in such notice and shall thereupon be entitled to receive payment of the redemption price. In case less than all the shares represented by such surrendered certificate are redeemed, a new certificate shall be issued representing the unredeemed shares. If such notice of redemption shall have been duly given, and if on the date fixed for redemption funds necessary for the redemption shall be available therefor, then, notwithstanding that the certificates evidencing any Preferred shares so called for redemption shall not have been surrendered, the dividends with respect for the shares so called for redemption shall cease to accrue after the date fixed for redemption and all rights with respect to the shares so called for redemption shall forthwith after such date cease and determine, except only the right of the holders to receive the redemption price without interest upon surrender of their certificates therefor.

If, on or prior to any date fixed for redemption of Preferred shares, this Corporation deposits, with any bank or trust company in Salt Lake City, State of Utah, as a trust fund, a sum sufficient to redeem, on the date fixed for redemption thereof, the shares called for redemption, with irrevocable instructions and authority to the bank or trust company to give the notice of redemption thereof if such notice shall not previously have been given by this Corporation, or to complete the giving of such notice if theretofore commenced, and to pay, on and after the date fixed for redemption or prior thereto, the redemption price of the shares to their respective holders upon the surrender of their share certificates, then from and after the date of deposit (although prior to the date

fixed for redemption), the shares so called shall be deemed to be redeemed and dividends on those shares shall cease to accrue after the date fixed for redemption. The deposit shall be deemed to constitute full payment of the shares to their holders and from and after the date of the deposit the shares shall be deemed to be no longer outstanding, and the holders thereof shall cease to be shareholders with respect to such shares, and shall have no rights with respect thereto except the right to receive from the bank or trust company payment of the redemption price of the shares, without interest, upon the surrender of their certificates therefor.

- (d) So long as any of the Preferred shares shall be outstanding this Corporation shall not without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least two-thirds of the total number of Preferred shares outstanding:
 - 1. alter or change the rights, preferences or privileges of the Preferred shares so as materially adversely to affect the Preferred shares; or
 - 2. increase the authorized number of Preferred shares; or
 - 3. create any new class of shares having preferences over or being on a parity with the Preferred shares as to dividends or assets, unless the purpose of creation of such class is, and the proceeds to be derived from the sale and issuance thereof are to be used for, the retirement of all Preferred shares then outstanding; or
 - 4. purchase any Common shares, or declare or distribute any dividends on Common shares;
 - 5. merge or consolidate with any other corporation, except into or with a wholly owned subsidiary corporation, with the requisite shareholder approval; or
 - 6. sell, convey or otherwise dispose of all or substantially all of the property or business of this Corporation; or
 - 7. incur, assume or guarantee any indebt edness (other than such as may be represented by the obligation

to pay rent under leases) maturing more than eighteen (18) months after the date on which it is incurred, assumed, or guaranteed by the Corporation, except construction loans, purchase money obligations, obligations assumed as part of the price of property purchased, or the extension, renewal or refunding of any thereof, or Series A Debentures not exceeding a face amount of \$8,000,000.00.

- (e) The Corporation shall have a continuing right to call the Series A Debentures at face value upon payment of all accumulated and unpaid interest thereon, but shall have no such right as long as there are accumulated and unpaid dividends on the Preferred shares.
- (f) The Common shareholders shall have exclusive voting rights and powers and shall be entitled to cumulative voting in the election of directors.
- (g) All issued shares of the Corporation shall be fully paid and non-assessable.
- (h) Until the Corporation has issued 1,800,000 shares of Preferred stock, no Preferred shareholder of the Corporation shall have pre-emptive rights to purchase Preferred shares of the Corporation which may thereafter be issued. Until the Corporation has issued 2,117,647 shares of Common stock, no Common shareholder of the Corporation shall have pre-emptive rights to purchase Common shares of the Corporation which may thereafter be issued. Thereafter, Preferred and Common shareholders, respectively, shall have pre-emptive rights.

Article 7. Directors

The number of directors of this Corporation shall be seven, unless and until increased or decreased by amendment of the Bylaws; but no decrease shall reduce the number of directors below three (3) or have the effect of shortening the term of any incumbent director. The names and

addresses of the original directors of the Corporation are:

Edgar B. Stern, Jr.

6 Garden Lane

New Orleans, Louisiana 70124

Dwight W. Martin

415 Park Road

Metairie, Louisiana 70005

Stanley Cohen

1501 Antigua Way

Newport Beach, California 92660

John W. King .

30392 Paseo Del Valle

South Laguna, California 92677

Adam Y. Bennion

1449 St. Albans Road

San Marino, California 91108

Clark L. Wilson

309 Kearns Building

Salt Lake City, Utah 84111

K. D. Loughridge

500 Crandall Building

Salt Lake City, Utah 84101

Article 8. Receipt of Minimum Capital.

The Corporation will not commence business until consideration of the value of at least \$1,000.00 has been received for the issuance of shares.

Article 9. Incorporators.

The names and addresses of the incorporators of this Corporation, all natural persons of the age of twenty-one (21) years or more, are:

Stanley Cohen

1501 Antigua Way

Newport Beach, California 92660

John W. King

30392 Paseo Del Valle

South Laguna, California 92677

Adam Y. Bennion

1449 St. Albans Road

San Marino, California 91108

Exec	uted this 28th da	y of Klarel	, 1970, Salt La	ke
City, Utah.				
		Stanley Cohen	2 Clar	<u> </u>
	•	John W. King	1. Bing	

VERIFICATION

STATE OF CALIFORNIA) ss

I, the undersigned, a Notary Public duly commissioned to take acknowledgements and administer oaths in the State of California, certify that ADAM Y. BENNION, being one of the foregoing incorporators, personally appeared before me and swore to the truth of the facts therein stated.

WITNESS my hand and Notarial Seal this 28th day of April, 1970.

My Commission expires:
RUTH K. KERR
My Commission Expires July 26, 1971

RUTH K. KERR

NOTARY PUBLIC-GALIFORNIA

PRINCIPAL OFFICE IN

LOS ANGELES COUNTY

VERIFICATION

STATE OF UTAH) ss COUNTY OF SALT LAKE)

I, the undersigned, a Notary Public duly commissioned to take acknowledgements and administer oaths in the State of Utah, certify that STANLEY COHEN and JOHN W. KING, being two of the foregoing incorporators, personally appeared before me and swore to the truth of the facts therein stated.

WITNESS my hand and Notarial Seal this 30th day of

1970.

My Commission expires:

MICROFILMED

ARTICLES OF AMENDMENT TO THE ARTICLES OF INCORPORATION

AP

<u>OF</u>

TREASURE MOUNTAIN RESORT COMPANY

Pursuant to the provisions of Section 16-10-57 of the Utah Business Corporation Act, the undersigned corporation adopts the following Articles of Amendment to its Articles of Incorporation:

FIRST: The name of the corporation is:

TREASURE MOUNTAIN RESORT COMPANY.

SECOND: The following amendment of the Articles of Incorporation was adopted by the shareholders of the corporation on the 24th day of April, 1971, in the manner prescribed by the Utah Business Corporation Act:

RESOLVED: That Article 1 of the Articles of Incorporation of this corporation be amended so as to delete said Article 1 as it presently appears and to substitute therefor the following:

"ARTICLE 1. Name

The name of the corporation is: GREATER PARK CITY COMPANY."

THIRD: The number of shares of the corporation outstanding at the time of such adoption was 1,742,647, and the number of shares entitled to vote thereon was 1,217,647.

FOURTH: The designation and number of outstanding shares of each class entitled to vote thereon as a class were as follows:

Class

Number of Shares

Common

1,217,647

FIFTH: The number of shares voted for such amendment was 1,217,647, and the number of shares voted against such amendment was: None.

SIXTH: The number of shares of each class entitled to vote thereon as a class voted for and against such amendment, respectively, was as follows:

> Number of Shares Voted Class Common 1,217,647 None

SEVENTH: The manner, if not set forth in such amendment, in which any exchange, reclassification or cancellation of issued shares provided for in the amendment shall be effected is as follows: None.

EIGHTH: The manner in which such amendment effects a change in the amount of stated capital and the amount of stated capital is changed by said amendment are as follows: No change.

Dated this 24th day of April, 1971.

TREASURE MOUNTAIN RESORT COMPANY

Its/Secretary Assistant

STATE OF UTAH) : ss.
COUNTY OF SALT LAKE)

I, RICHARD K. SAGER, a Notary Public, do hereby certify that, on this 24th day of April, 1971, personally appeared before me J. WARREN KING, who, being by me first duly sworn, declared that he is the President of TREASURE MOUNTAIN RESORT COMPANY; that he signed the foregoing document as President of the corporation; and that the statements therein contained are true.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 24th day of April, 1971.

My Commission Expires:

<u>.</u>

July 10, 1973

Notary Public

Residing at Salt Lake City, Utah

00400129

Filing Fee: \$1.00

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1976 DEC 22 AM 11: 5

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CERTIFICATE

(Regarding transacting of business under an assumed name)

STATE OF UTAH	\		•
County of	Summit ss.	•	•
	signed, who are (is) carrying y that the assumed name is	on, conducting or to	ransacting business under ar (Not a Corporation
	Park City Ski Corporation		
Complete Address:	1284 Empire Avenue P. O. Box 39 Park City, Utah 84060		
	ue name or names, of the pers		
Greater Park	Names City Company.	P. O.	Addresses
a Utah corpor			ity, Utah 84060
. "			·
	· Man	_ Q holm	m President
		V	

Signatures of persons named above

CORPORATION IMPORMATION

TITAH UNION PACIFIC CORPORATION PROFIT: P STATUS: GOOD STANDING DATE: 00/00/00 CODE: 0 TYPE: 50 FOREIGN CORP. NAME: REG. AGENT: STEVEN A GOODSELL IMCORP - A CT - DA TR: 02/03/1069 20/22/20 406 WEST FIRST SOUTH AGNT-CHG-DATE: 00/00/00 REINS-DATE: SALT LAKE CITY, UTAH PREV-RES-DATE: 00/00/00 INACTIVE-DATE: 00/00/00 02/06/27 34101 AGENT-ADDR: 00/00/00 ANN-RPT-DATE: INTENT TO: RESIGN-DATE: 90/00/00 PROF-RPT-DATE: 20/00/20 VICE PRESIDENT SECREMARY PRESIDENT/DIRECTOR MERIO M D DREW LEWIS W J MC DOMALD PAGE PARK AVENUE MEN YORK, NY 345 PARK AVENUE 345 PARK AVENUE HEW YORK, MY MEU YORK, MY 1015H OFFR-RES: 00/00/00 10154 OFFR-RES: 00/00/00 10154 OFFR-BES: 00/00/00 CORPORATION TYPE: D CORPORATION KIND: 04 REMARKS: Y STATED CAPITAL: 332,201,472 ADDITIONAL SHARES: N AUTHORIZED فتتكنيناته NUMBER CLASS DATE PAR VALUE 72/05/27 272.776 04/25/90 PREFERRED .0000 20,000,000 115,575,755 03/05/07 COHMON 2.5000 74/19/25 300,000,000

2-SCREEN 2: R-REMARKS: F-FORMARD: B-DACK

FEE \$5.00 Make check payable to Annual Report Section

RESULT IN SUSPENSION OF THE CORPORATIONS CHARTER.

16-10-121 AND

CORPORATIONS MUST FILE THEIR ANNUAL REPORTS WITHIN THE

MONTH OF THEIR ANNIVERSARY DATE. FAILURE TO DO SO WILL

122.

U.C.A.,

*PURSUANT TO SECTION

DEPARTMENT OF BUSINESS REGULATION DIVISION OF CORPORATIONS AND COMMERCIAL CODE

. 8 1986 6705-26 REV. 8 85 STATE OF UTAH

CORPORATION ANNUAL

00400131

P.O.Box 45801

(801)530-6012

Salt Lake City, Utah 84145-00

In compliance with Section 16-10-121 & 122, and Section 16-10-12 or 16-10-110, U.C.A., 1953, the following report ,and if applicable the statement of change of registered office and/or agent, is submitted: (PLEASE TYPE OR PRINT CLEARLY!)

		002083 INC: 07				
	EXACT CORPORATE NAME	UNION PACIFIC R		PANY		
	REGISTERED AGENT	STEVEN A. GOODS	ELL			
	•	406 WEST FIRST	SOUTH			•
	REGISTERED OFFICE	SALT LAKE CITY	UTAH 84101			in the second of
2	IF NEW REGISTERED AGENT	AND/OR OFFICE	DI E A SE COA	ADIETE		= 3
<u>'</u>	IF NEW REGISTERED AGEIGT	AND/OR OFFICE,	FLEASE CON	MPLETE	-5-3	
	New Registered Agent				\$7,27	/
					(Registered age	ht's signature)
	New Registered Office		City		Staye	TUTAH TZip
	•	(Street Address)			•	
	With the above change, the accress of tr	ne registered office and the	address of the b	usiness office of th	ie Tegistered agent	are identical.
3	INCORPORATED UNDER TH	E LAWS OF Ut	ah		(STATE OR COUNTR
4	IF INCORPORATED OUTSID	E THE STATE OF	UTAH, GIVE	THE ADDRES	S OF THE PR	INCIPAL OFFICE
	IN THE STATE OR COUNT	RY OF INCORPORA	TION.	_		
		City		State Count	or try	Zip
	(Street Address)					
<u>5</u>	TYPE OF BUSINESS COND			rrier - Rail		
6	NAMES AND RESPECTIVE					
D	n 0 101	NAME_	1416 Dodg	REET e Street	Omaha	NE 68179
			1416 Dodg	e Street		, NE 68179
	2 11 01		345 Park			ork, NY 10154
	7 77 37 11 1	. TTT		Avenue		ork, NY 10154
7	surer L. W. Matthews DIRECTORS: (UTAH LAW R				11011 1	J, 1010 .
<u></u>	DIRECTORS: (STATE LAW 1)	LGOILLO AT LLAC	71 0 DIRECT	<u> </u>		
	<u></u>	NAME	ST	REET ADDRESS	. <u> </u>	TY, STATE, ZIP
	1					
	2 SEE ATTACHED				_	
r a n	3	NOT 0114 NOT 7111			SV/SIVIO	\$ - 7 1
8	AUTHORIZED SHARES (DO				Sec	moer of Shares
	Number of SharesAuthorized		Series, If Any Within A Class	Par Valu Of Share		thout ParCValue
			Within A Class			1
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	20,000,000	PREFERRED		10.0000	5 8	The state of Shares
9	NUMBER OF SHARES ISSU				22	= m
	Number of Shares		Series, If Any	Par Valu	e <u></u>	mber of Shares
	issued	By Class V	Within A Class	Of Share	<u> </u>	thout Par Value
	22,428,715	Common		10.0000		' ₩
		Preferred		10.0000		
1O	STATED CAPITAL AS OF	DATE OF THIS REP	PORT (Numbe	er of Shares (ssued X Par	Value)\$ 224,287,150
٠ -	Under the penalties of perjury and as a					
÷ :	registered office and/or agent, has bee	n examined by me and is,	to the best of my	Knowledge and bei	let, true, correct, an	ia complete
		\ []				
11	BY Crober D. E	S lanner		72 Presi	ident	
	Authorized C)fficer)		i a Title or	Position
	(If Registered Agent and/or Registered O	-		13 DATE	July	17 . 1986
	change must be authorized by a resolution.		Directors, and	Send Report &		
	The President or Vice President must sign	in the report./		Remittance to:	Annual Repo	rt Division
EE S	5.00 Make check payable to Anni	ual Report Section		-		SOUTH 2ND FLOOR-

C040C1328

UNION PACIFIC RAILROAD COMPANY

Director	E. V. Conway	30 Wall Street	New York, NY 10022
Director	W. S. Cook	345 Park Avenue	New York, NY 10154
Director	S. F. Eccles	P.O. Box 30006	Salt Lake City, UT 84111
Director	J. B. Fery	One Jefferson Square	Boise, ID 83702
Director	E. T. Gerry	59 Wall Street	New York, NY 10005
Director	W. D. Grant	One Penn Valley Park	Kansas City, MO 64108
Director	D. B. Jenks	9900 Clayton Road	St. Louis, MO 63124
Director	J. C. Kenefick	1416 Dodge Street	Omaha, NE 68179
Director	O. T. Lawler	P.O. Box 2097 Term. Annex.	Los Angeles, CA 90054
Director	A. L. Lewis, Jr.	1416 Dodge Street	Omaha, NE 68179
Director	J. R. Meyer	322 Morgan Hill	Boston, MA 02163
Director	M. F. Miller	1700 Farnam Street	Omaha, NE 68102
Director	M. K. Milliken	1045 Sixth Avenue	New York, NY 10009
Director	H. B. Mitchell	299 Park Avenue	New York, NY 10017
Director	E. L. Palmer	399 Park Avenue	New York, NY 10022
Director	R. W. Roth	411 NE 19th Avenue	Portland, OR 97232
Director	W. M. Shapleigh	Suite 3110 Ralston Purina One Mercantile Center	St. Louis, MO 63101
Director	R. D. Simmons	1150 15th Street NW	Washington, DC 20071
Director	V. F. Taylor, Jr.	1670 Denver Club Bldg.	Denver, CO 80202

CORPORATION INFORMATION

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HATH
002083 UNION PACIFIC RAILROAD COMPANY -
                                 DATE: 00/00/00 CODE: 0 TYPE: 24 PROFIT: P
STATUS: GOOD STANDING
FOREIGN CORP. NAME:
                                                     IMCORP-ACT-DATE: 07/01/1907
REG. AGENT: STEVEN A. GOODSELL
  405 WEST FIRST SOUTH
                            AGNT-CHG-DATE: 12/23/76 REINS-DATE:
                                                                      00/00/00
 SALT LAKE CITY, UT
                            PREV-RES-DATE: 00/00/00 INACTIVE-DATE:
                                                                      00/00/00
 84101
                                                                     07/20/97
                            AGENT-ADDR:
                                           02/15/79 ANN-RPT-DATE:
INTENT TO:
                                                                     00/00/00
                                           100/00/00 PROF-RPT-DATE:
                            RESIGN-DATE:
 PRESIDENT
                            VICE PRESIDENT
                                                       SECRETARY
 R. G. FLANNERY
                            J. R. DAVIS
                                                       C. M. CLSEM
                                                       34F PARK AVENUE
 1416 DODGE STREET
                            1416 DODGE STREET
 OMAHA, NEBRASKA
                                                       MEU YORK, MEW YORK
                            OMAHA, NEBRASKA
 68179 OFFR-RES: 00/00/00 68179 OFFR-RES: 00/00/00 10154 OFFR-RES: 00/00/00
 CORPORATION TYPE: D
                           CORPORATION KIND: 04
                                  STATED CAPITAL: 224,287,150
          REMARKS: Y
ADDITIONAL SHARES: N
                                       AUTHORIZED
                                                            DATE
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                PAR VALUE
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2-SCREEM 2; R-REMARKS; F-FORWARD; R-BACK

00400134

APPROVED by the Division of Corporations and Commercial Code of the Utah State

Department of Business Regulation ARTICLES OF MERGER OF

on the ICA day of Supe A.D. 19 87 PACIFIC SUBSIDIARY, INC. HATCHIN 12 AN II: 05

Corporate Documents Examiner On Union PACIFIC RAILROAD COMPANY 12 AN II: 05

Fres paid \$ _35.00

Pursuant to the provisions of Section 16-10-70 of the Utah Business Corporation Act, the undersigned corporation, Union Pacific Railroad Company, a Utah corporation ("UPRR"), hereby certifies as follows:

The constituent corporations are UPRR and Pacific Subsidiary, Inc. ("Pac Sub"), a Delaware corporation and wholly owned subsidiary of UPRR.

The plan of merger of Pac Sub into UPRR, SECOND: which will be the surviving corporation, is set forth resolutions adopted by the Board of Directors of UPRR November 20, 1986; a copy of such resolutions is attached as Exhibit A.

There are outstanding 200 shares of Pac Sub's THIRD: common stock, its sole class of common stock, and UPRR owns all such shares. Each share of Pac Sub common stock shall be converted into one share of UPRR common stock.

A copy of the plan of merger was delivered to FOURTH: UPRR, the sole shareholder of Pac Sub, on March 16, 1987.

> June _10th Dated:

> > UNION PACIFIC RAILROAD COMPANY

Vice President

SERVICES.

K. D. Petersen Assistant Secretary

WESTERN PLAZA 5TH

STATE OF NEBRASKA)) ss:
COUNTY OF DOUGLAS)
T San	by certify that on this 10th day
	d notary
public. do here	by certify that on this 100 day
of (und	, 1987, personally appeared before me
	K. D. Petersen, who, being by me first duly
sworn, declared th	at they are the Vice-President and Assistant
Secretary, respect:	ively, of Union Pacific Railroad Company, that
they signed the	foregoing document as Vice-President and
Assistant Secretary	y, respectively, of such Company, and that the
statements contains	ad therein are true

Notary Public

UNION PACIFIC RAILROAD COMPANY

ELIMINATION OF SUBSIDIARIES

The Chairman advised the Board that it would be desirable to simplify the organizational structure of Union Pacific Railroad Company (the "Company") and its subsidiaries by merging into the Company certain of its subsidiaries. The Chairman advised that the Company holds all of the outstanding stock of each such subsidiary, except in certain cases for qualifying shares owned by directors of the subsidiary who are also officers of the Company and who have agreed to surrender such shares upon request.

Whereupon, after discussion and on motion duly made and seconded, it was unanimously

RESOLVED that Union Pacific Railroad Company (the "Company") merge into itself and assume all of the liabilities and obligations of each wholly owned subsidiary of the Company (a "Subsidiary") set forth below:

Des Chutes Railroad Company
-Bos Angeles & Salt Lake Railroad Company
Mount Hood Railway Company
-Oregon Short Line Railroad Company
Oregon-Washington Railroad & Navigation Company
Pacific Subsidiary, Inc.
Sacramento Northern Railway
The St. Joseph & Grand Island Railway Company
Tidewater Southern Railway Company
The Western Pacific Railroad Company
Yakima Valley Transportation Company; and

FURTHER RESOLVED that such mergers be effected through a series of transactions whereby:

- (A) (i) Tidewater Southern Railway Company and Sacramento Northern Railway are each merged into The Western Pacific Railroad Company ("WP"), (ii) WP is merged into Pacific Subsidiary, Inc. ("Pac Sub"), and (iii) Pac Sub is merged into the Company;
- (B)(i) Des Chutes Railroad Company, Oregon-Washington Railroad & Naviga tion Company, and Yakima Valley Transportation Company are each merged int

Oregon Short Line Railroad Company ("OSLR"), and (ii) OSLR is merged into the Company;

(C) Los Angeles & Salt Lake Railroad Company, Mount Hood Railway Company, and The St. Joseph & Grand Island Railway Company are each merged into the Company; and

FURTHER RESOLVED that the Plan of Merger of a Subsidiary into the Company (or WP, Pac Sub or OSLR, as the case may be) shall be as follows:

- (a) The Company (or WP, Pac Sub or OSLR, as the case may be) shall continue as the surviving corporation in the merger (the "Surviving Corporation") and the separate corporate existence of the Subsidiary shall cease.
- (b) Each share of capital stock of a Subsidiary shall be converted into one share of stock of the Surviving Corporation.
- (c) The Articles of Incorporation and the by-laws of the Company (or WP, Pac Sub or OSLR, as the case may be) shall be the Articles of Incorporation and by-laws of the Surviving Corporation, in each case until thereafter amended as provided by law.
- (d) The merger shall become effective upon the filing of the requisite documents with state authorities and compliance with other requirements of applicable state laws pertaining to mergers; and

FURTHER RESOLVED that the President, any Vice President, the Treasurer, any Assistant Treasurer and the Secretary or any Assistant Secretary of the Company be, and they each hereby are, authorized and directed to execute, under the corporate seal of the Company, Articles of Merger or a similar document required in order to merge each Subsidiary into it and to assume the liabilities and obligations of the Subsidiary on the effective date of the merger, and to file such document with the Secretary of the State of Utah and such other officials of other states as may be necessary to effect each such merger; and

FURTHER RESOLVED that the foregoing officers of the Company be, and they each hereby are, authorized and directed to do all acts and things what-soever which may be in any way necessary or proper to effect each such merger.

I, C. N. OLSEN, Secretary of Union Pacific Railroad Company, do hereby certify that the above and foregoing is a true copy of preamble and resolution duly adopted by the Board of Directors of Union Pacific Railroad Company at a regular meeting of said Board of Directors held at the office of the Company in the City and State of New York, on the 20th day of November, 1986, at which a quorum was present.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the seal of said Company this 20th day of November, 1986.

(SEAL)

(SIGNED) C. N. OLSEN

Secretary



PRENTICE HALL CORPORATE SERVICES

1907 JUN 12 AM 11: 06

<u>Direct Dial:</u> (212)373-7215 1-800-221-0770 United States Corporation Company
The Prentice Hall Corporation System

June 11, 1987

Ms. Margaret Cowan
Department of Business Regulation
Division of Corporations & Commercial Codes
Corporation Division
160 East 300 South
P.O. Box 45801
Salt Lake City, Utah 84145-0801

RE: UNION PACIFIC RAILRAOD COMPANY
Merger of: PACIFIC SUBSIDIARY, INC.
Our ref. #15-87-1154

Dear Margaret:

As per our discussion this afternoon I am enclosing herewith on behalf of the above an original and copy of the Articles of Merger together with our check in the amount of \$35.00.

Please confirm, on Friday, the receipt of this package using the above toll-free number and the understanding that the Articles will not be filed until the opening of business, Tuesday morning. On Tuesday, we would appreciate telephone confirmation of filing.

If for any reason after reviewing these documents please call me immediately should there be any corrections to be made.

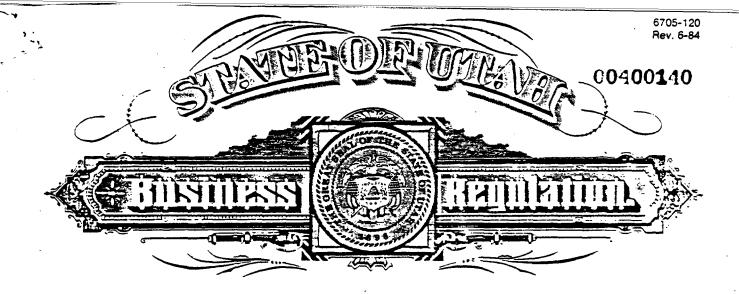
Thank you for your courtesies extended to us.

Sincerely yours,

Leif A. Tonnessen

Assistant Vice President

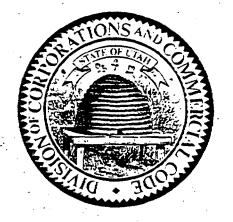
LAT:ep encl. FEDERAL EXPRESS



THE DEPARTMENT OF BUSINESS REGULATION, DIVISION OF CORPORATIONS AND COM-MERCIAL CODE CERTIFIES THAT UNION PACIFIC RAILROAD COMPANY is a Utah Corporation and qualified to do business in the State of Utah. A certificate of such incorporation was issued from this office on July 1, 1897 and said corporation is currently in good standing. Following is a list of attachments to the Articles of Incorporation filed with this office:

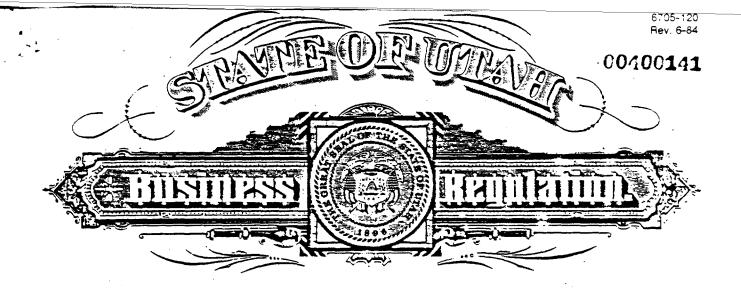
Articles of	Amendment	•		October 9,	1899
Articles of	Amendment			October 9,	1899
Articles of	Amendment	:		October 9,	1899
Articles of	Amendment	•		March 23,	1901
Articles of	Amendment			March 23,	1901
Articles of	Amendment			May 9,	1905
Articles of	Amendment			May 9,	1905
Articles of	Amendment			June 24,	
Appointment	of Assistant	Secretary		January 19,	
Appointment	of Assistant	Secretary		November 21,	
Articles of	Amendment		•	May 9,	1945
Articles of	Amendment	• .		May 11,	1948
Articles of	Amendment	•		May 12,	1953
Articles of	Amendment	• ,		May 8,	1956
Articles of	Amendment			May 14,	1968

AS APPEARS OF RECORD IN THE DIVISION OFFICE.



File #002083

Dated this	uay 01
	A.D. 19
Director, Division of Corpora Commercial Code	itions and

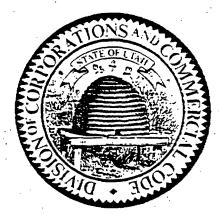


THE DEPARTMENT OF BUSINESS REGULATION, DIVISION OF CORPORATIONS AND COM-MERCIAL CODE CERTIFIES THAT the following is a continued list of the documents filed with this office for UNION PACIFIC RAILROAD COMPANY:

Restated Articles
Articles of Amendment
Articles of Merger
Articles of Amendment
Articles of Merger
Articles of Amendment

December 31, 1968
June 24, 1971
June 25, 1971
January 28, 1983
June 16, 1987
July 6, 1987

File #002083 AS APPEARS OF RECORD IN THE DIVISION OFFICE.



Dated this	25.5	th day of
	September	A.D. 19.87
	£., \$ _	
Director, D	ivision of Corporati	ons and
Commercia	al Coae	